AN EXPLORATORY STUDY OF MIDLIFE TRANSITION IN SOUTH AFRICA: IN SEARCH OF THE MIDLIFE CRISIS

by

LAWRENCE CARRINGTON PALK

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SUMMARY

Strong opposing views exist with the popularly held notion that a midlife crisis is a normative phenomenon whilst a number of international researchers assert that the evidence shows the opposite to be true. It is nevertheless acknowledged that the psychology of midlife was one of the least researched areas internationally until the 1990s when certain aspects of midlife were investigated in the United States. Findings from these studies did not include the impact of a multiplicity of factors in combination at midlife.

A new approach to the study of the life course using a combination model taking account of the influence of societal structures as well as the interplay between parts has been suggested. Such an approach to midlife transition and crisis research is not known to have taken place in South Africa or internationally. A conceptual model of midlife transition and crisis was constructed from known research and relevant literature and tested using a sample of 220 individuals aged between 30 and 65. The validity of the model was established and a methodologically sound measuring instrument was validated as a more accurate measurement of midlife crisis than a self-described experience. Two factors provisionally named stagnation and death and aging anxiety were found to exist. A true midlife crisis was experienced by a minority of individuals (15 percent) but an additional 31 percent had a troublesome but manageable experience. A neurotic disposition, the absence of good parental relationships, and the use of inappropriate coping skills such as wishful thinking were in combination related to high scores on the midlife crisis scales. A qualitative study revealed that over 90 percent of respondents were able to define a midlife crisis accurately although they tended to overstate the occurrence thereof. This replicates the research findings in the United States. Stagnation was experienced more acutely by individuals aged between 40 and 50 years whilst death and aging anxiety was the primary experience for those over 50 years. The validated conceptual model and measuring instruments can be used by therapists and coaches to facilitate the counselling or coaching process with clients experiencing midlife crisis.

Key words: Midlife transition, midlife crisis, stagnation, immobility, death and aging anxiety, relationship with parents, neuroticism, wishful thinking

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DECLARATION

I**,** the undersigned, hereby declare that the work contained in this dissertation is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature _____

Date 11 May 2015.

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ABBREVIATIONS

Big Five	Big Five personality traits – Extraversion, openness to experience, Neuroticism, agreeableness, conscientiousness
Biodata	Biographical information such as age and gender
DSM V	Diagnostic and Statistical Manual (fifth edition)
FA	Factor Analysis
FFM	The Five Factor Model
KMO	Kaiser-Meyer-Olkin
MIDMAC	The Research Network on Successful Midlife Development (McArthur Midlife Project)
MLC	Midlife crisis
MIDUS	Midlife in the United States survey,
MBTI	Myers Briggs Type Inventory
MCQ	Midlife crisis questionnaire
MRA	Multiple Regression Analysis
MTQ	Midlife transition questionnaire
NEO-PI	Neuroticism, Extraversion, and Openness - Personality Indicator
SEDs	Socially Expected Durations
SOC	Selective, Optimisation with Compensation model
SPSS	Statistical Package for the Social Sciences
PCA	Principal Component Analysis
WCQ	Ways of Coping Questionnaire

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CHAPTER 1

INTRODUCTION

> The first half of life consists of the capacity to enjoy without the chance; the last half consists of the chance without the capacity.
>
> Mark Twain (as cited in Negri, 1999, p. 30)

As is clear from the above quotation, Mark Twain, many years ago, had already conceived change at midlife with concomitant losses and gains. Baltes (cited in Giele & Elder, 1998) and Lachman (2001) similarly suggested that human aging involves both losses (mainly biological in nature) and gains (mainly cultural in nature). After the transition into midlife, the individual often attempts to manage life's challenges by carefully selecting options, when this becomes necessary, as well as to optimise performance on tasks through practice and to compensate where necessary to obtain satisfaction with life. This outcome, after the so-called 'midlife transition', is suggested as a consequence of successful resolution of midlife transition issues in the theoretical framework for this thesis and will be explored in depth in the chapters to follow.

1.1 THEORETICAL DEVELOPMENT TIMELINE

1.1.1 Historical references to midlife and midlife crisis

The concept of 'midlife' or 'middle age' is first located in ancient history as early as 300 B.C. by Aristotle who spoke of the "Prime of Life", which according to him, occurred at age 50 (Chuska, 2000, p. 165). The term "midlife crisis" was coined by Jaques (1965, p. 512) in his seminal essay *Death and the mid-life crisis.* Here he quoted a passage from the *Aeniad* of

Virgil (70-19 B.C.) in this regard: “Down to Avernus the descent is light. But thence the journey to retrace, there lies the labour, there the mighty toil by few achieved”. To illustrate the notion further, Jaques also quoted from Dante Alighieri’s work, *The divine comedy,* where Dante says:

> In the middle of the journey of life, I came to myself within a dark wood where the straightway was lost. Ah, how hard it is to tell of that wood, savage and harsh and dense, the thought of which renews my fear. So bitter is it that death is hardly more.
>
> Dante Alighieri (cited in Jaques, 1965, p. 505)

Since Dante commenced writing *The divine comedy* at age 37, Jaques (1965) has suggested that the above passages describe a midlife crisis. He drew another conclusion from Shakespeare’s play *As you like it,* written in 1599, where the dramatist refers to the stages of the human life span to include the midlife transition, or more implicitly, according to Jaques (1965) the midlife crisis. In his monologue in the play, popularly known as *The Seven Stages of Man,* the character Jaques describes the life span as follows:

> At first the infant, mewling and puking in
> the nurse’s arms;
> And then the whining school-boy, with his
> satchel and shining morning face,
> creeping like snail unwillingly to school.
> And then the lover, sighing like furnace, with a
> woeful ballad made to his mistress’ eyebrow.

> **Then, a soldier full of strange oaths and bearded like**
>
> **the pard, jealous in honour, sudden, and quick in quarrel'**
>
> **seeking the bubble reputation even in the cannon's mouth.**
>
> **[**emphasis added].
>
> And then, the justice, in fair round belly, with good
>
> capon lin'd, with eyes severe, and beard of formal
>
> cut, full of wise saws and modern instances; and so he
>
> plays his part.
>
> Shakespeare (cited in Harrison 1937, p. 59)

The words emphasised above by the current researcher refer to the midlife transition and crisis period as postulated by Jaques (1965).

1.1.2 Modern era developments in midlife transition and crisis

Modernism in psychology had its advent in the mid-nineteenth century when psychology became a separate discipline from philosophy and started to consider itself as a science (Hergenhahn, 2009). The focus from then on was on the developing infant and child, heavily influenced by the thoughts and ideas of Freud and his followers.

The psychology of midlife was, however, not studied by many theorists in the early modern era, apart from Jung (1933) and Frenkel (1936), who dealt with it as part of a greater whole life span. Jung (1933), probably the first stage-based adult developmental theorist, claimed that statistical tables showed a rise in the frequency of mental depression in men around the age of 40 years whereas for women it happened a little earlier in life. The transition between ages 35 and 40 heralded a change in the psyche which, according to Jung (1933), was indirect and involved slow changes in the person's disposition of

which the person would not be aware and was thus not conscious of. Jung's insight in this regard is still highly respected today, and his essay of 1933 is often to be found in the list of references of academic articles on the subject of midlife transition.

The focus on the effects of infancy and early childhood on individuals' development prevailed until the mid-twentieth century when Erikson (1950; 1959; 1982), Jaques (1965) and Neugarten (1968a) provided what McAdams (1993, p. 195) terms "thoughtful accounts" of change in midlife. In the last quarter of the twentieth century, a postmodernist approach to the adult stages of the life cycle started to develop, and substantial research took place, which lead to clarified, expanded and new ideas of stage-based adult development (Gould, 1978; Havighurst, 1972; Levinson, Darrow, Klein, Levinson & McKee, 1978). These researchers were influenced by the views of Erikson (1950; 1959), Jaques (1965) and Jung (1933).

1.1.3 Towards postmodern theories of midlife transition and midlife crisis

At the same time as the unfolding developments in the field of psychology, there were other social scientists such as sociologists, anthropologists and demographers who were also engaged in life course research with particular emphasis on research methodology. O'Rand (1998, p. 58) highlights the issue of "social time**"** which was derived from research by Merton (as cited by O'Rand, 1993, p. 59) who had identified "socially expected durations" (SEDs). These SEDs, according to Merton (cited by O'Rand 1993, p. 59) are "socially prescribed or collective expectations of the timing of certain social events within social structures". This concept is also found in the social psychology domain where the concept of the "social clock**"** was submitted (Neugarten, Moore & Lowe 1968; Neugarten, 1969). It has been studied and expanded further by various researchers (Helson, Mitchell & Moane, 1984; Wrosch & Heckhausen, 2005; Zimbardo & Boyd, 2008) and pertains to a set

of expectations regarding whether certain age-appropriate transitions in the lives of individuals have transpired, for example, most people are expected to get married sometime in their twenties and if they are still unmarried in their thirties they would be regarded as behind or off time on that aspect. The social clock is the standard against which individuals evaluate the extent to which important milestones in their lives are on track, or not. The concept of an individual being on- or off-track with these events is important as it could partly explain why the stage-based and task-specific theories of midlife crisis (Erikson, 1959; Gould, 1980; Havighurst, 1972; Levinson et al., 1978) could not be significantly replicated in later research (McCrae & Costa, 2003). If the SEDs are changing with ensuing generations and the technical, scientific and medical advances with apparent increasing flexibility in this regard, then the timing of transitions could vary considerably amongst midlife individuals. The concept of the social clock in midlife will be part of the conceptual framework and will be explored and studied in this research project.

It should be mentioned that the issue of 'generativity', which is a cornerstone of Erikson's (1950, 1959) stage and task-specific theory for midlife, is one aspect for which researchers seem to have found validity. Erikson (1950) defined generativity as a key life task in middle age where individuals seek to establish and guide the next generation. Stewart and Ostrove (1998) mention a number of studies which have found that generativity is higher in middle age than in early adulthood (McAdams, de St Aubin & Logan, 1993; McAdams, Hart & Maruna, 1998; Ochse & Plug, 1986; Peterson & Stewart, 1993; Ryff & Heincke, 1983; Ryff & Migdal, 1984; Vaillant, 1993). On the other hand, Stewart and Ostrove (1998) have commented that other theorists and researchers are equivocal about the matter (Gruen, 1964; MacDermid, Frans & De Reus, 1998; Whitbourne, Zushlag, Elliot & Waterman, 1992). Vandewater and Stewart (1998) suggest that there are three forms of generativity, namely, generative desires, felt capacity for generativity and generative accomplishment. These distinctions could explain the above-

mentioned equivocation between theorists and researchers. In 2010, the present researcher, in developing a midlife crisis questionnaire, did a pilot study on a sample of 58 midlife individuals using the revised version of a Midlife Crisis Questionnaire (Oles, 1999) to which an additional 60 items relating to values and mid-career issues were added. A principal component analysis of the data revealed, inter alia, a construct of generativity as found also by Oles (1999) and Hermans and Oles (1999). The issue of generativity will be further examined in this current research study and included in the theoretical framework.

1.1.4 Postmodern research into midlife transition and midlife crisis

Stewart and Ostrove (1998) have argued that the span of middle-age depends on the generation that is middle aged at a particular point in history. This is brought about by social and technological changes (for example, advances in medical science may affect the upper limit of the middle-age stage). Giele and Elder (1998) refer to cohort studies that show that the shape of the life course is different depending on one's year of birth. It should also be noted in this regard that the midlife research studies done in the 1970s used subjects from the 'Silent' Generation' (i.e. parents of 'Baby Boomers') while the research conducted on middle-aged people in the late 1980s and early 1990s focused on the Baby Boomer generation(i.e. individuals born between 1945 and 1962). The subjects for the current research study will be 'Generation X' (i.e. individuals born between 1964 and 1980) (Coupland, 2000).

The need to study the impact of different cohorts on the issue of midlife transition and crisis is thus deemed important and will be included and investigated in this current research study.

Research by McCrae and Costa (2003) and others in the USA in the 1970s and 1980s led to a paradigm shift in the thinking regarding personality traits,

as they were able to prove the stability of the so-called ‘Big Five’ personality traits over time periods, including during midlife. Earlier theorists (Levinson et al., 1978; Neugarten, 1968c) had claimed that personality changed in midlife and this, according to McCrae and Costa (2003), was now refuted. McCrae and Costa (2003) and others (Cooper, 1977; Farrell & Rosenberg, 1981) had also conducted research into the midlife crisis in the late 1970s and early 1980s and found no evidence of a normative midlife crisis. After additional replication attempts, however, they came to the conclusion that those individuals who did suffer from a midlife crisis were probably predisposed to having numerous crises not only in midlife, and that this was probably caused by high scores on the neuroticism scale. Although he was a stage theorist, Jung (1933, p. 103) also made this point, as he argued that people with “neurotic personalities” were more likely to experience problems in midlife. McCrae and Costa (2003) stated that when the stage theories were in vogue in the 1970s, the case for the stability of personality traits had not yet been made. They claim that certain personality traits caused crises, and not the other way around. Data on the personality traits Neuroticism, Extroversion and Openness-to-experience will be collected and used in the analysis as well as the testing of McCrae and Costa’s (2003) hypothesis that changes in these three personality traits during midlife is actually insignificant.

A major turning point in developing theory and research of midlife transition and midlife crisis was the establishment of The Research Network on Successful Midlife Development (MIDMAC) in 1990 by the John D. and Catherine T. MacArthur Foundation in the USA. Brim, Ryff and Kessler (2004), all of whom were involved with MIDMAC, noted that there was abundant literature on early life, childhood and old age but surprisingly little attention was given to the middle years, despite middle age being the longest segment of the human lifespan. A team of 13 eminent researchers from a number of fields within social science was therefore assembled into a ‘midlife

network'. Substantial and significant research into midlife and midlife crisis was then undertaken (Lachman & James, 1997; Wethington, 2000; Wethington, Kessler & Pixley, 2004). A national survey entitled *Midlife in the United States* (MIDUS), was carried out in 1995/1996 when 7 189 people across the USA were canvassed for information and data, using a number of relevant measures. One of the major findings of the survey, in relation to midlife transition, was that "emotional profiles of midlife adults were more influenced by context than that of young or older adults" (Brim et al., 2004, p. 16). The development of such theory and research within the late modernist and postmodernist eras will be the focus of the exploration of the literature in Chapter 2 of this thesis. Furthermore, the primary mode of enquiry will be a postmodernist approach to the study of midlife transition and midlife crisis in South Africa, incorporating social psychology.

According to Barder (1993), from age 30 onwards, a number of physical changes take place in the average person's body: aerobic capacity decreases, muscle mass, bone density and muscle elasticity reduce, lung elasticity declines, the metabolism slows, body fat increases and the immune system becomes weaker. For this reason people in their thirties will often take up running to offset the effects of aging. More than half the participants in the New York Marathon are over 40 years of age.

For some individuals the realisation that they are proceeding towards middle age is experienced as sudden, which could indicate the repression or sublimation of the mental or psychological transition process, as well as the unconscious aspects thereof. Developmental changes in the use of ego defense mechanisms occur in midlife (Vaillant, 1977) and will be elaborated in Chapter 2. Similarly the concept of 'ways of coping' with stress (Folkman, Lazarus, Dunkel-Schetter Delongis & Gruen, 1986) is often used in midlife crisis research and the questionnaire of Folkman et al. has been used by some researchers into midlife crisis (Oles, 1999). The "Ways of Coping Scales"

(Folkman et al., 1986) is available on-line in the public domain and will be used as a measure in this current research study.

Of course, a human being does not go to sleep one night as a youthful adult and wake up the next morning as a middle aged individual. There is always a period during which certain changes (physiological, social and psychological) take place. It is the cumulative effect of these changes, perhaps a turning point (Clausen, 1998; Wethington. et al., 2004) or triggering event, which leads to a reflective backwards look which could eventually result in the realisation by the individual that he/she is indeed approaching or has arrived at middle age. The period during which these changes take place would, therefore, constitute the midlife transition. The extent to which this transition period is troublesome or stressful is popularly referred to as the midlife crisis. But the question still remains: Is the midlife crisis a myth or not? There are proponents of both views. The short answer to this question is: It all depends. A triggering event or turning point which may bring the progression of the transition process to mind is often one's 40th birthday party. These events are not called 'over-the-hill parties' for nothing (McAdams, 1993). A practical example of such a triggering event was related to this researcher by a 39-year-old, unmarried female client without children, who was buying a gift for her mother when she was asked by the sales assistant whether she was buying the gift for her daughter or herself. She initially could not understand why the sales assistant would ask such a question but, later in the day, suddenly realised that if she had married at age 23, like her mother, she would have a 16- year-old daughter and so the question from the assistant was not illogical. This, the client said, really made her feel old and was depressing.

Clausen (1998, p. 194) conceived life reviews as an "adjustment of self-image" by an individual and "spontaneous life reviews" as fabrications impacted by the situations or life events which triggered the review. The concepts of life reviews, turning points or life events as constituting a

triggering event and/or ego defenses are important constructs that will form part of the theoretical framework in this research project.

The term ‘midlife crisis’ is ubiquitous in modern Western society (Wethington et al., 2004) and indeed much better known than the term ‘midlife transition’. Numerous books have been written and films made on the subject and the term has been popularized to the extent that it is an expected phenomenon by a substantial proportion of the population. Over 90 percent of a sample in the USA was able to define midlife crisis (Wethington, 2000), which supports the view that it is a well-known concept \even if socially constructed. This researcher’s data captured for this research project (220 responses) reveals exactly the same phenomenon in South Africa. McAdams (1993, p. 195) postulated that “the midlife crisis is a good concept trivialized by popular culture”. This view is fully descriptive of one of the reasons why this topic was ultimately chosen for this thesis.

The question as to when midlife begins and ends needs clarification since views in the literature regarding this aspect vary considerably, and the research sampling of individuals for this research project needs to take cognizance of this aspect. Many authors used chronological age as a determinant of middle age and the most popular age span used for midlife research is between ages 35 and 60 (Cierna, 1985b; Jaques, 1965; Jung, 1933; Neugarten,1968b). Other authors have, however, begun to describe middle-age somewhat differently. Wethington (2000) argued that midlife is in effect, an ‘elastic’ term encompassing the period between the ages 30 and 60. Neugarten (1968b, p. 94), viewed it as a period in the life cycle, “which is qualitatively different from other age periods” and is better defined in terms of status in different domains rather than by chronological age. Tamir (1982, p.vii) “rediscovered” the importance of social status as a critical modifier of developmental transitions. McAdams (1993, p. 197) posited that midlife is socially defined based upon assumptions that people have about the human

life cycle, and he defines it as "a chunk of time comprising the period following early adulthood and preceding retirement".

Staudinger and Bluck (2001, p. 6), in discussing the issue, offered a different view where they posited that middle age may be "better defined by a pattern of characteristics than simply chronological age". Accordingly, the relationship between "chronological age to social, psychological and biological age may well be the best way to study midlife in context".

Staudinger and Bluck (2001) also posed an interesting question as to whether the possible reason for both negative and positive findings regarding midlife transition experienced by people could be that there are two distinct phases within midlife – early midlife and late midlife. Early midlife is seen as the departure period from youthful adulthood while late midlife is the exit from midlife and entrance period into old age. They suggested that this may enable a more precise research undertaking and also harmonise seeming variations in findings. This view is supported by Rosenberg, Rosenberg and Farrell (1999).

1.2 DEFINING SOME KEY CONCEPTS

1.2.1 Midlife transition

Peck (1968, p. 89) suggested that, based on personality analysis of thousands of people in midlife, mostly men, that, "the critical transition point [is] somewhere between the late thirties and the late forties". Brim (1976, p. 3) has stated that the word 'transition' involves change or movement from one thing to another and "implie[s] stages or periods in the growth of personality". He also suggested that a period of transition into middle age is an accepted and well known phenomenon. He averred that:

> [T]he evidence shows, and most agree, that as an individual moves through the adult years they become transformed in appearance, social or life patterns, interests, relationships and also in regard to inner qualities; for example, ways of experiencing and expressing emotions and motivations and preoccupations. (Brim, 1976, p. 3)

This concept is still quoted with acceptance today (Lachman & James, 1997; Ryff, 1991). Furthermore, Lowenthal, Thurnher and Chiriboga (1975) linked a midlife transition period to changes in status and roles, for example, in work, marriage and retirement.

Midlife transition is regarded by many researchers as a period of great changes in family such as marriage, birth of children, illness or death of parent, promotion or demotion or lack of promotion, as well as changes in roles and relationships (Arnold & McKenry, 1996; Kruger, 1994; Waskel & Phelps, 1995). Other researchers have focused on internal changes which take place, such as in the individual's behaviour, values and identities (Hudson-Allez, 1999; Vaillant 1977) and have argued that midlife transition requires dealing with the feelings that may arise from these changes. Becker (2006, p. 87) stated that "there is general agreement in the literature regarding the tasks, changes and conflicts characteristic of the midlife transition", although he referred to it as a midlife crisis. He suggested that there are four "fundamental elements of the existential discourse - death, isolation, freedom and meaning". Ellman (1992, p. 564) suggested that there are "universal phase specific tasks at midlife and if these are experienced as pathogenic trauma, they can be described as a crisis event". Neugarten (1968c, p. 140) on the other hand, observed that midlife represents an important turning point with the "restructuring of time and the formulation of new perceptions of self, time

and death". The terms used by her were 'time', 'change' and 'interiority' for when individuals tend to become more reflective and self-evaluative during this period.

The terms 'transition' and 'crisis', with regard to midlife, are sometimes used interchangeably by some authors and researchers. Oles (1999, p. 1403), however, sees the midlife transition and midlife crisis as being discrete, distinguishable variables. He referred to a midlife transition as a period that takes place without distress, whereas a midlife crisis "implies that the self goes through an intensively difficult period". This conception will be explored further in this research study. Julian, McKenry and Arnold (1990) distinguished between the two constructs of midlife transition and midlife crisis by suggesting that when the midlife transition is accompanied by a stress response then it can be termed a midlife crisis. They also suggested that midlife transition should not be seen as a negative process as there is also an opportunity for personal growth. Julian et al. (1990) studied the construct and found that the midlife stress outcome was only influenced by the role adjustment that is necessary during the transition period. If this role adjustment led to stress, by the challenge of youthful roles and the challenge of identity by the aging process, then a midlife crisis could be said to have occurred. Coping mechanisms such as problem solving or distancing (Folkman & Lazarus, 1985) are used to deal with this, and depending on the means utilised to cope, could prolong and/or intensify the crisis (Oles, 1999).

Traditionally, the transition period to the middle years is associated with a great deal of change which is thought to influence roles at work and in the family. These changes relate mainly to biological, psychological and social aspects of the individual's life. Levinson et al. (1978, p. 21) see midlife transition as a set of changes across a time period which are related to personal development. They see this becoming a midlife crisis when personal growth is thwarted.

Kruger (1994, p. 1299) cited the midlife crisis definition of Cytrynbaum et al. as “a state of physical and psychological distress which results from developmental tasks being too overwhelming for a person's internal resources and social supports”. Oles (1999) supported this view based on the results of research conducted in Poland. However, Kruger (1994) is of the firm view that the transition period to the middle years is a normal period of development change in midlife with normative experiences and tasks. He disagrees with the view that a majority of individuals experience it as a crisis.

It seems clear, therefore, that midlife transition is a time period and a process in the lifespan of human beings as they move from being youthful adults (up to approximately 35 years) into becoming middle aged (approximate period of middle age being between the ages of 36 to 65).

In countries where, according to the *Daily Telegraph* UK (2012), the life expectancy of the population is in the late forties, for example, Afghanistan (49.72), Swaziland (49.42), South Africa (49.41), Guinea Bissau (49.11) and Chad (48.69) “many people are expected to die before they even reach middle age” and the conceptions of midlife transition and crisis would not apply to most of the population. According to Global Age Watch (2013) the life expectancy at birth in South Africa is 54 years of age. Statistics South Africa (2013) shows the life expectancy figure in South Africa as 59 years of age based on the 2012 census. Class differences in South Africa as they correlate with race are very apparent with concomitant major differences in life expectancies amongst the different classes. Accordingly, the focus of this study will be on middle-class individuals in South Africa which is approximately the same socio-economic groups studied in the USA and Europe with regard to middle age issues. Although specific information on the life expectancy of middle-class individuals is not available, the racial breakdown of the population by age group implies that middle-class

individuals do live longer than lower socio-economic classes. This aspect will be further unpacked in the research design chapter of the current research study (see Section 4.6).

1.2.2 Crisis

Crisis is an illustrative word used in different contexts and having different explanations (Perun & Bielby cited in James & Gilliland, 2001). What exactly is meant by the word crisis within the term midlife crisis is of considerable importance and this is probably the cause of much of the marked differences of opinion between those who believe that it does occur (the protagonists) and those who believe it is a myth (the antagonists). The *Concise Oxford Dictionary* (2002) definition of a crisis is "a time of intense difficulty or danger". Synonyms for the word in this dictionary are: "emergency, dilemma, predicament, quandary, disaster, catastrophe and turning point". These synonyms unfortunately add to the confusion as the words "dilemma" or "quandary" on the one hand and "catastrophe" or "disaster" on the other, would seem to describe events which differ significantly in intensity, although the same situations would be a dilemma for some but might be a perceived disaster for others. The *Chambers Thesaurus* I phone application includes fifteen synonyms for the word crisis which also vary from catastrophe, calamity and disaster to quandary. It is worth noting that both sources do include the words "turning point" insofar as the individual is concerned.

Wethington (2000) pointed out that the term midlife crisis is elastic and laypeople define it much wider than the scientific definition of crisis. What then is the scientific definition of a crisis as it relates to developmental or social psychology? Caplan (cited in James & Gilliland, 2001) defined crisis as a situation where an individual faces a hindrance to a life purpose or objective that is seemingly overwhelming to him/her if the normal methods of disentanglement of such a crisis were attempted. This results in a period of

disarray or confusion. Belkin (cited in James & Gilliland, 2001 p. 424) described crisis as a "personal difficulty or situation" that cripples the individual from knowingly being able to direct his or her life. It is thus clear from the foregoing that crisis for the individual is a specific state of mind (James & Gilliland, 2001).

A stage-based approach to the development of a crisis is dealt with by Marino (1995) who postulated four distinct stages:

- An event or situation occurs and a judgement has to be made by the person experiencing the situation as to whether his or her normal way of coping will be able to resolve the issue;
- If the judgement is in any way ambivalent or negative, then anxiety arises and confusion around the event intensifies beyond the ability of the individual to cope;
- A felt need for the assistance of an external resource, such as counselling, occurs; and
- Treatment is necessary to solve possible serious personality disruption. The key point here also is that alleviation of the situation must be obtained to avoid more severe repercussions.

Crises, however, are both a time of vulnerability and possibility (James & Gilliland, 2001). Possible growth can arise out of the crisis which can, in retrospect, be very positive. James and Gilliland also distinguished between different crisis domains, namely: developmental crises, existential crises, situational crises and environmental crises. This study will focus on the first two of these domains.

1.2.3 Midlife crisis

None of the main stage theorists of the modern era namely Jung (1933), Erikson (1950), Levinson et al. (1978) and Gould (1980) emphasised the occurrence of crises in midlife, although they do state that if midlife developmental issues and tasks are unresolved then these regular transitions can become crises. Gould (1978) and Levinson et al. (1978) also suggested that a crisis in midlife implies a fundamental change in personality. Whether or not this view is correct depends on the particular definition of personality that is adopted. If by 'personality' one means 'personality traits' then settled research (McRae & Costa, 2003) show this to be untrue. If it is defined broadly then it is clear that some aspects such as motivation, values, goals and 'the self' do change (Lachman, 2001). There can, of course, be crises without transitions or personality changes, but this requires a different definition of crisis, namely, one of intense suffering, such as a temporary physical ailment, or extreme fear for an event that does not take place, neither of which need yield any significant durable change in personality.

Wethington (2000) postulated that the definitions of midlife crisis used by lay-respondents in her study were often much wider than those used by researchers of midlife issues. Twenty six percent of those individuals who participated in the research reported that they had had a midlife crisis of some sort. Although this finding would appear to debunk earlier theories that midlife crisis is a normative event experienced by all or most people, a figure of 26 percent is nevertheless a significant percentage. What is more important, of course, is how stressful and debilitating the 'crisis' was. The concepts of first degree, second degree and third degree crisis are borrowed from the medical profession and are used in this current research study and as a prominent part of the conceptual framework which will also, inter alia, examine and explore the extent of perceived midlife crisis as well as its intensity (Hermann & Oles, 1999; Oles, 1999).

Wethington (2000) questioned why the emphasis is on stress rather than growth. She is also of the view that "almost any event or feeling which is socially symbolic of aging can qualify as a midlife crisis, if the definition is very elastic" (Wethington, 2000, p. 99). Wethington suggested that there is a disparity between researchers and laymen regarding how to define midlife crisis since even theorists and researchers use different definitions of the construct. She therefore puts the following definition of midlife crisis forward: "A difficult transition occurring at about the age of 40" (Wethington, 2000, p. 86). Brim (as cited in Wethington et al., 2004, p. 586) reviewed research studies and found that ten percent of the groups experienced an "intense period of turmoil", called the midlife crisis. It is submitted that even a seemingly low figure of ten percent could well be significant enough to have a serious impact on society, particularly if such midlife crisis is chronic in nature.

Many researchers (Brim, 1974; Cierna, 1985b; Dickstein, 1972; Jaques, 1965, Levinson et al., 1978, Neugarten, 1968b) have defined the concept of midlife crisis. The main aspects within these definitions are as follows:

- Deep changes in the psyche, attitudes, values, behaviour, personality;
- Fear and anxiety of death; and
- The experience of emotional turmoil.

Other theorists and researchers have emphasised developmental tasks which overwhelm the individual who is lacking in internal and external resources or has inadequate ways of coping (Erikson, 1959; Frankl, 1946; Oles, 1999). A meta or philosophical view of the concept is expressed by Anshin (1985, p. 248) who sees the major midlife dilemma as the need to "relinquish the fantasies of immortality, omnipotence, omniscience and grandiosity".

On the other side of the continuum, there are antagonists such as McCrae and Costa (2003), Kruger (1994) and Bandura (1997) who are of the firm view that the so-called midlife crisis is nothing more than an "adjustment disorder", as found in the *Diagnostic and statistical manual* (DSM V, 2013, p. 286) which is suffered by some individuals. Kruger (1994, p. 1302) referred to the phenomenon as "a maladaptive reaction to an identifiable psychosocial stressor or stressors". Bandura also submitted that:

> The midlife crisis resides more in the rhetoric of popular media than in the actual experiences of people in middle life. Most people navigate through the middle years efficaciously. Some do not; adaptation in midlife is best predicted by the interplay of personal attributes and life circumstances rather than by one's age. (Bandura, 1997 p. 198)

While both of these views seem sensible as sentiments, it has been postulated that there are various life circumstances that are particular and perhaps peculiar to midlife (Cierna, 1985b; McAdams, 1993), such as physiological changes in the body, death of a parent, and care for a parent, caring for adolescent children, and reaching career midpoint. The question that follows if this is the case is: Are crisis forming events more probable during the midlife transition period than in other life span stages? This current research study will attempt to answer this question.

In the 1970s, midlife transition and crisis were seen as a developmental stage that all individuals went through (Erikson, 1959; Gould, 1978; Levinson et al., 1978). The popular view in the general population in the USA, which was inspired by Sheehy (1976) that a mid-life crisis was inevitable (normative)

was, and still is, believed by many to be the case (Brim 1992; McAdams, 1993). Wethington (2000) and Lachman (1997) have, however, shown through studies by the MIDMAC (McArthur Midlife Project) in the USA that a midlife crisis is not normative. McCrae and Costa (2003) have also clearly demonstrated through numerous studies that personality traits do not change during midlife and they also firmly believe that the midlife crisis is not normative. However, these researchers do distinguish between personality traits and characteristic adaptations and they also acknowledge that the latter do change during the midlife stage. Characteristic adaptations are defined as encompassing motivations, goals, the self and other, as well as development stages and tasks in which identity, generativity and ego development are emphasised (McAdams, 2009). McCrae and Costa (2003) typified them as attitudes and values, social roles, interpersonal relationships and the self-concept. Stewart and Ostrove (1998, p. 1186) argued that certain developmental theories for example that of Jacques (1965), Jung (1933) and Levinson et al., (1978) do not focus on personality traits which are assumed to be stable over time periods but instead emphasise certain "aspects of personality (structures, preoccupations etc.) that are hypothesised to change". Stewart and Ostrove (1998, p. 1186) questioned whether the so-called midlife crisis was not rather a "midcourse correction that resembles a crisis" and also noted that while change or transition took place, it is "neither universal nor necessarily as dramatic as the word crisis suggests". It is proposed that the issues where development takes place are in the areas of "identity certainty, generativity, confident power and awareness of aging" − all of which aspects are experienced as more prominent in middle age than in early adulthood (Stewart & Ostrove 1998, p. 1189).

Yet, despite the predominant research findings in the post-modern era, the faith in the concept of the midlife crisis by popular demand remains a prominent belief both in the Western world and in all likelihood in South Africa as well. This is emphasised by the USA consensus definition of midlife

crisis which was, “personal turmoil and sudden change in personal goals and lifestyle brought about by the realisation of aging, physical decline or entrapment in unwelcome restrictive roles” (Wethington, 2000, p. 86).

Helson (1997, p. 21) attempted to bring closure to the debate by her statement:

> Critics of theories of adult development often focus on discrediting the existence of a normative midlife crisis. I think it is time to move on from debating this point. No major theorist argues for a normative midlife crisis in the sense of psychological disturbance. The evidence supports theories of middle age toward increasing complexity, productivity and altruism and that there are often difficulties in making these changes. (Helson, 1997, p. 21)

The present researcher, in 2008 handed 35 of the most common definitions of midlife crisis from the literature, to 18 consulting psychology doctoral students with a mean age of 40, who then participated in a focus group. The focus group dealt with three tasks: the first of which was to agree on certain words which seemed to be common to all the definitions. The consensus among this focus group on the term midlife crisis was the following: loss, change, age, death, identity, anxiety and trust.

The second task which the focus group had to deal with was to agree on the common characteristics of a midlife crisis from the definitions given (even if only experienced by few people). The consensus was that it was:

(i) a conscious process, in that people are aware of what is happening to them during middle age;
(ii) people are taking stock or an inventory of their lives;
(iii) there can be negativity;
(iv) there is an adaptation process;
(v) it is also about fantasised hopes not being met and weighing up losses and dreams against hopes;
(vi) it is often unconscious (the opposite of above);
(vii) it is a reality check;
(viii) ignorance and arrogance catch up with you; and
(ix) it is an involuntary process which just happens at this stage of your life.

The third task was for the focus group to define what they thought was a midlife crisis. Their answer explicated midlife crisis as 'a change in personality (more a manifestation of behaviour not personality trait change)'. Feature words were: crisis, challenge, anxiety, and turning point. When asked whether the concept of a midlife crisis, as the group had defined it above, resonated with them individually, there was hesitancy and a marked reluctance to discuss it. The following is a composite summary of the remarks made by a few individuals in the focus group without any consensus: **Some may have a crisis, but for most it is rewarding. It is awareness that things may be escalating in intensity and for such people there may be a crisis. It is a challenge not a crisis.**

1.3 A PSYCHODYNAMIC PERSPECTIVE OF MIDLIFE

Neugarten's (1968c) concept of the emergence of "interiority" in midlife is generally accepted (Clausen, 1998, p. 194). Interiority is defined as the "looking within" and the domain of the self is thus emphasised. Karp (cited in Stewart & Ostrove, 1998, p. 1186) refers to the midlife stage as a focus on inner experiences

where individuals look at the inner world of "spirituality, reflection and introspection".

McAdams' (1993, p. 197) view is that due to the popularisation by the press of the "sexy" idea (as he puts it) of midlife crisis and the "corresponding minimisation of the idea by scientific researchers" the concept of midlife crisis is not regarded seriously by many theorists. While the normative changes in midlife may not produce the degree of distress that would show up on short personality questionnaires, McAdams, nevertheless, posits that the changes are more subtle, probably more private than individuals imply, although they might be popularly claimed otherwise, and that these changes are profound. The probability that the changes are taking place in the subconscious is thus inherent.

Some researchers (Gutmann, 1987; Levinson, 1996) expanded on Jung's (1933) theory of anthropomorphic archetypes and postulated the crossover of gender in middle age where the feminine side of men develops and the masculine side of women develops.

McAdams (1993, p. 5) also offered a lifespan developmental theory of how identities are created. Influenced by narrative psychology, his major idea, based on his own research and literature studies, is that:

> [I]dentity is the life story of an individual and the life story is a personal myth that the individual begins working on in late adolescence and young adulthood in order to provide his or her life with unity or purpose and in order to articulate a meaningful niche in the psychosocial world. (McAdams, 1993, p. 5)

The life story, he claims, develops over the lifetime and does not stop when middle age is reached. It includes many different features and aspects such as our own personal background and the personal myth is the narrative of the self. Furthermore, the personal myth attempts to bring together the different parts of ourselves (McAdams, 1993, p. 12). McAdams conceives the main characters in the personal myth as internalised 'imagos' which resemble, inter alia, "Jungian archetypes" or the "internalised objects" utilised by object relations theorists such as Fairburn, Guntrip and Klein (cited by McAdams 1993, p. 315) or "ego states" used by Berne (1961).

Ego states which were originally discovered by Federn (cited by Watkins & Watkins 1997) are the fundamental themes used by Berne (1961) in his transactional analysis, where he theorises that individuals behave in different states such as the 'adult', the 'adaptive or free child' and the 'critical or nurturing parent'. It is, however, submitted that this conception is limited. Watkins and Watkins (1997, p. 7) expanded on Berne's concept of ego states by developing a theory that is a "different way of viewing normal personality, its development, its pathologies, and especially the concept of what constitutes the self".

McAdams (1993, p. 202) suggested that fundamental conflicts in our "myth" that we create, are only identified in midlife and that certain features only emerge at midlife which serve as a challenge to our identity.

1.4 PROBLEM STATEMENT

No significant research into the psychosocial aspects of midlife transition and/or midlife crisis in South Africa seems to have been carried out or could be found in an extended literature search. This was established by searching current research and university websites in an attempt to discover whether or not any theses and/or dissertations or research on the subject existed. International websites were also investigated and it was discovered that major research has taken place in the last

two decades predominantly in first-world societies in Europe (United Kingdom, Germany, Holland and Poland) as well as some research in India, China and Japan. The most extensive research has been conducted in the USA since the 1990s where major longitudinal and cross-sectional research has taken place. This research changed contemporary knowledge of the phenomenon, for instance with regard to the occurrence of a midlife crisis. Based on a scientific research definition of the term midlife crisis it seems that it does not occur nearly as often as the popular press would have us believe (Wethington, 2000).

The psychodynamics of midlife transition have not formed a major part of the USA research apart from the research done by McAdams (1993) and some research in Argentina (Montero, De Montero & Vogelfanger, 2013). A further reason for the lack of empirical research in this regard seems to be the inability, as yet, to access quantitative data. The difference of opinion between some academics and the general population with regard to whether or not midlife crisis exists, as well as the lack of knowledge and research in the areas described above, specifically in South African communities, reveals that a clear gap in knowledge of the phenomenon in South Africa does exist.

The existing midlife research in the first-world countries has focused predominantly on middle-class groups who are linguistically literate with post-school education, in higher level work positions and in developed free-market economies where life expectancy is much higher than in densely populated, third-world underdeveloped or developing countries.

The term midlife crisis does, however, need to be explored and examined in the South African context. Furthermore, even if ten to 25 percent of the population experience some form of abnormal stress at midlife as found by research in the USA (Brim, 1992; Wethington, 2000), this is significant enough to have adverse consequences for a population. McAdams' (1993, p. 196) contention is that sight has been lost of important developments in the personality that "do often occur in

the midlife years" as a result of this minimising of the concept by scientific researchers.

South Africa has one of the largest and most sophisticated economies in Africa with first world infrastructure as well as economic institutions. Since the 1994 advent of the new political dispensation and, inter alia, employment equity legislation in South Africa there has been a substantial increase in the number of people who would be regarded as middle class in skilled job positions due to significant increases of previously disadvantaged groups into more senior and management positions in companies and organisations. The number of South Africans in the middle-class group has therefore increased by 56 percent during the period 2001 and 2011 according to *Business Day Live* (The new middle class, 2013). It is consequently important to establish whether the theories and research findings from elsewhere in the world, most notably the USA, have applicability in South Africa within the middle-class group with life expectancies similar to the USA population, and if so, the extent to which this is the case. Furthermore, it would also be important to identify what impact midlife has, if any, on the family, community, and workplace and at a personal level, as well as with regard to the multicultural nature of the South African population.

Midlife is usually the time when the combination of, inter alia, work and life related knowledge, experience, skill, maturity, physical and mental fitness and motivation of individuals is at its optimal level. Such individuals usually also occupy key roles in organisations and it is thus very important that their services are retained and that they perform optimally for their own and the organisation's continued productivity, efficiency and effectiveness (Lachman, 2001).

It is known that there is a skills shortage in South Africa and the country can therefore ill afford the phenomenon of midlife crisis exacerbating the problem even further. At the same time when people are between the ages of 35 to 60 years, this

is also the time period when inevitably stressful life events and fears/anxieties about growing older (trigger events) start occurring.

1.4.1 The possible implications of a midlife crisis in South Africa

The phenomenon, if it exists and becomes chronic, could have serious implications at individual, group and organisation level. For instance, illness, burnout or hospitalisation of individuals, de-motivation, staleness and withdrawal at work in one form or another such as temporary withdrawal of effort, attention, presence (poor performance and/or absenteeism) or permanent withdrawal (termination of employment). It also follows that de-motivation in and withdrawal from relationships in families and/or with partners has a similar impact. Other implications of experiencing a midlife crisis are the negative effects on teams, interpersonal conflicts, loss of profits and/or productivity for the organisation and dislocation in families and communities. According to Jung (1933) and those who quote him with approval (Gould, 1978; Levinson, 1978) midlife transition is essential to both individuation as well as wholeness. Therefore it should not be inequitably avoided. It is submitted, however, that it is preferable that the transition takes place in such a manner that, if it causes a crisis, the crisis is acute rather than chronic. Moreover, if a method of facilitating momentum to a state of wellness can be found this would be of considerable benefit. This aspect will be an important part of the conceptual framework in this research project.

1.5 RESEARCH QUESTIONS

The following research questions will be addressed by this research study:

1. Is there an age period during which midlife transition and crisis takes place?

2. Can the self-reported definition and experience of midlife crisis, be converted to quantifiable values for analysis?
3. Are there significant differences in the self-reported definition and experience of midlife crisis by the various age and gender cohorts?
4. Is there a methodologically sounder way of measuring whether a midlife crisis is being, or has been, experienced (measuring tool)?
5. What is an operational definition of a midlife crisis?
6. Is the midlife crisis measuring tool (MTQ) a valid measure of a midlife crisis?
7. How does the quantified self-reported experience of midlife crisis compare to the MTQ components as a predictor of midlife crisis?
8. How does the quantitative research output of the current research study compare with the work done by Oles (1999) and his associates?
9. Does midlife transition and possibly midlife crisis occur later than thought, due to increased longevity?
10. Is there a variation in the experience of the midlife crisis (moderate to severe)?
11. Does the MTQ analysis reveal any particular personality characteristics, biographical factors and/or ways of coping that are related to the components of stagnation and death aging anxiety?

1.6 RESEARCH OBJECTIVES

The overall aim of this research study is to explore the concept of midlife transition in South Africa and to investigate whether, what people popularly term a midlife crisis, occurs, to what extent and if it is indeed a crisis. This would ideally lead to the establishment of an operationally sound definition of midlife crisis as experienced by South Africans. The main features of the study will be an attempt to

replicate the work of others and to create a new understanding of some existing insufficiently researched aspects.

The sub-aims of the study are:

- To establish a methodologically sound method of measuring how and why individuals experience midlife transition and possibly crisis.
- To establish key data for South Africa, namely:

  - The percentage of people who experience the midlife crisis;
  - The variation in the intensity of the midlife crisis from moderate to severe;
  - The age span at which it occurs. The impact of increased longevity on the onset age at which the midlife crisis occurs would also be established;
  - To establish an assessment process and tools for determining whether a midlife crisis is occurring;
  - To build a conceptual model of what factors may impact on a midlife crisis with each dimension of the model unpacked, defined, and measurable and with the weighted contribution of such dimensions to a midlife crisis being determined; and
  - The establishment or proposal of a solution for preventing and/or minimising a midlife crisis becoming chronic for those individuals who may be predisposed to having one.

A research sample of individuals representing the South African middle class is to be subjected to measurement of the key constructs mainly through quantitative methods. The measures were determined by reference to the dimensions of the conceptual framework to see if there is a distinction (and if so, the extent thereof) between those who have/are experiencing a midlife crisis as defined and those who have not had a crisis.

1.7 CHAPTER LAYOUT

- Chapter 2 will encompass an exploration and study of the relevant literature on midlife and midlife crisis mainly in the late modern and post-modern eras.
- Chapter 3 will deal with the conceptual framework for the phenomena of midlife transition and midlife crisis. Emphasis will be on issues such as: (i) the social clock, (ii) turning points and life events as triggers; (iii) generativity; (iv) some of the big five personality traits (Neuroticism, Extraversion and Openness to experience); (v) ways of coping with stress; (vi) experience of midlife transition; (vii) the existence and intensity of midlife crisis; (viii) social roles; (ix) interiority as well as (x) demographic, economic and biographical life history data.
- Chapter 4 will be devoted to the research design of this study, research methods, measures to be used as well as sampling and data capturing.
- Chapter 5 will include the data captured, analysis thereof and findings.
- Chapter 6 will detail the conclusions, limitations and recommendations of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The middle years of human beings' lives was not a major focus of study by researchers until the 1990s. Notwithstanding, some important theories regarding midlife did emerge in the 1950s and 1960s (Erikson, 1950; Jaques, 1965; Neugarten, 1968a). Jung (1933) had earlier written about midlife transition and a possible crisis but as part of a lifetime development theory. A literature study would, therefore, not be complete without an examination of what these early theorists had to say specifically about midlife transition and crisis in its broadest sense. It should also be mentioned that these early theorists all followed a psychodynamic paradigm in their theoretical approach, which meant that little quantitative or so-called scientific research took place. As stated in Chapter 1, the term midlife crisis gained traction in the popular press in the late 1960s and the 1970s and new researchers (Gould 1978; Levinson et al., 1978) took the subject of adult development further but continued with a psychodynamic approach. The 1980s saw the advent of a more scientific approach to research into midlife (Farrell & Rosenberg, 1981; McCrae & Costa 1986; Tamir, 1982) which resulted in criticism of earlier work in particular the suggestion by earlier theorists that personality changed in midlife. The work of MIDMAC described in Chapter 1 and which commenced in the 1990s is the most important research effort into many aspects of midlife in particular and enables current midlife researchers not only to examine specific aspects of midlife but also to critically reflect on earlier work in the field.

The focus of this literature study will be on the work done in the modern and postmodern eras from the 1960s to the present period. The study will also be sequential starting with some earlier 1960s theorists through to the work of

MIDMAC scholars in the 1990s and 2000s. It is clear also that the concept of a midlife crisis is complex (McAdams, 1993) and that a psychodynamic study may well reveal more in-depth knowledge but with less scientific rigour. In the interests of parsimony it was decided that a more quantitative approach would be followed since this is the first known research project into midlife transition and midlife crisis in South Africa. Accordingly, most psychodynamic adult-development literature that may be relevant is excluded from this literature study (apart from the important theorists mentioned earlier). For the sake of completeness, however, the conceptual model of midlife transition and crisis in Chapter 3 does include some important psychodynamic aspects.

2.2 MODERNISM IN PSYCHOLOGY AND THE STAGE THEORIES OF HUMAN DEVELOPMENT

The study of midlife as a specific period in the lifespan of individuals needs to be located within the lifespan as a whole. This is because developments and events in the individual's early life have an impact on and influence later periods in a person's life course. In this regard, there were three eminent figures in the modern era: Freud, Jung and Erikson.

2.2.1 Sigmund Freud's theoretical contribution

No study of the literature in midlife development would be complete without reference to the contribution of Sigmund Freud. It can be said that stage-based theories of adult development and the midlife transition in the modern era, had their genesis with Freud's final description of the libidinal stage (Fine, 1973). Freud's conception of psychology was that the role of the unconscious and sexuality is dominant and accordingly, his theory of personality development is described as a psychosexual development theory (Jahoda, 1977). This theory was based on five phases of psychosexual development. Fine (1973) describes the five stages as follows:

- The first three stages, namely, oral, anal and phallic begin at infanthood until the age of six;
- Stage four is referred to as the latency stage which occurs from age six to puberty; and
- The final stage five he called the genital stage which begins at the start of puberty when sexual urges are re-awakened.

Freud has been criticised by many for over-emphasising the sexual impulse (Jahoda, 1977; Jung, 1933; Kohut 1971; Plaut, 1998: Thompson, 1950). Although Freud's theory of sexuality was based entirely on his own observations in his clinical practice, his generalizations from these observations were nevertheless far-reaching (Fine, 1973). Freud never theorised specifically about further development taking place after stage five and into adulthood, but it is nevertheless posited that libidinal theory should not be enclosed within the literal meaning of his five stages. Fine has argued that Freud laid the foundation for whatever has happened in the development of the psychoanalytic field to date.

Two of Freud's early followers, Jung and Erikson, are key theorists in relation to midlife psychology and developed their own theories based on the psychodynamic school of thought initiated by Freud. Jung (1933) wrote an essay entitled *The stages of life* in which he explicated and elaborated on a theory of midlife. Erikson (1950; 1959; 1968; 1982) took Freud's Five Stage Psychosexual Development Theory and created a Psychosocial Theory incorporating an extension of the adolescent stage as well as an additional three adult stages. Erikson (1950) also gave a different meaning to the five stages by creating bipolar challenges for each stage for example, trust versus mistrust as the fundamental challenge for the infant in the oral stage (the infant has to learn to trust its caregiver to ensure its survival). Jung and

Erikson's theories are elaborated upon below and located within the late modern and postmodern theories of midlife as well.

2.2.2 Carl Jung's theory

Jung's (1933) theoretical views differed markedly in a number of respects from those of Freud. The differences in views between the two theorists that are relevant to midlife transition are as follows:

- Jung differed from Freud's emphasis on sexuality as the wellspring of all problems as Jung (1933) asserted that while sexuality was far reaching and important, it was just one of the drives in a person's life.
- Jung strongly asserted that Freud ignored spirituality completely. According to him history could not be changed and spirituality began with the dawn of primitive time and could not be denied. The testament to this the world over, was that humans had consistently looked for religious forms of demonstration and this was part of the inmost self. The process of developing the knowledge of the spirit is, according to Jung, the purpose and end goal of man.

Jung (1933) makes the observation that a person's life goal is to develop their consciousness to the extent that the entire unconscious has become conscious by the end of life so that completion of the individuation process is achieved. This seems to imply that all underlying and repressed or suppressed traumatic or troublesome memories have been surfaced, so that the individual is fully aware of them and has worked through and resolved them. Not everyone, however, achieves this goal. Society, according to Jung, also does not prize deeds of the inner self, but rather favours outer accomplishments instead,

Jung (1933) theorised that the person needs to turn away from defeatist beliefs that nature has ordered things. By working through the problems that

are faced, consciousness is increased. In fact, Jung stated that individuals should be thankful for the existence of problems as they facilitated growth. He also theorised that the ability to work through psychological problems only commenced at the beginning stage of puberty. Prior to this, the child remains completely reliant on its parents. In other words, psychic birth means that only at puberty, does the child have the ability to consciously distinguish the self from the parents. This is an important aspect in the adolescent stage, according to Erikson (1950), as this is the stage when the individual starts developing an identity, and that it is the unresolved identity crises from adolescence that are also sometimes revisited in midlife. In addition, it could well be that in midlife the adult's own offspring will have reached adolescence, and that conflict between the parent and adolescent could act as the trigger for midlife difficulties for the adult with unresolved identity issues from his/her own adolescence.

Jung (1933) further postulated that the period of youth lasted from just after puberty until middle age (between the 35th and 40th year). It is here that Jung's theory of midlife transition becomes apparent when he postulates that self-doubt and internal disharmony only emerge with development into the middle years. It is asserted that if the individual is sufficiently well prepared, the transition into midlife will be smooth. However, if the person holds on to misconceptions that run counter to the real world, difficulties will emerge. The causes of these difficulties, according to Jung, are the sometimes incorrect assumptions that individuals carry with them from childhood into adult life as well as inner psychological trouble. Jung suggested that such inner disturbances were caused by the sexual impulse as well as a feeling of inferiority arising from oversensitivity. He further posited that a possible cause of problems at the midlife transition is the need to hold on to youth and to remain unconscious.

According to Jung (1933), statistics showed an increase in the frequency of cases of depression in men at age 40 (what these statistics were, is not mentioned), and in women, it started somewhat earlier in life. He described the initial transition into middle age as indirect as it is not apparent. Jung asserted further that change in midlife seemed to emerge from the unconscious. The symptoms of the transition being slow change in the person's character, and some idiosyncratic attributes that had dissolved during childhood, were now resurfacing. Furthermore, there was a diminution of certain dispositions with the simultaneous increase in new activities, as well as alterations in former rectitude which become hardened and rigid. These conceptions of Jung's (1933) description of the midlife transition, indeed crisis, are still to be found in postmodern literature on midlife (Frans, 1997; Helson 1997; James & Lewkovicz, 1997; Lachman & James, 1997; Levinson et al., 1978; McAdams, 1993; McAdams, 2009; Parker & Aldwin, 1997).

According to Jung (1933), depression was linked to those persons who have rigid and inflexible personalities. He suggested that the psychological problems turn up sooner but possibly later – and indicated that the transition into midlife may occur in the forties and maybe even the fifties. He theorised further that the delay in this process could be caused if the parents of the individual were still alive and, in the case of men, the death of a father could have a much greater than normal impact on the man or, as Jung (1933, p. 107) described it a "catastrophic ripening". Jung postulated further that this rigidity in some was caused by the individual's endeavour to take the mystical inclinations of adolescence and young adulthood into midlife. This conception, in the opinion of this researcher, has, at the very least, a face validity and will be examined using the 'openness' personality factor – (0).

Jung (1933, p. 108) did not believe that the fear of death was the real cause of what he called 'problems in midlife' as do other theorists (Dickstein, 1972; Jaques, 1965). Jung's (1933) reasoning was that death at the midlife stage is

abstract as it is still far off and he rather thought that the difficulties of the midlife transition were to be found in profound and unusual psychological changes. To describe this, he used the metaphor of the daily course of the sun at ‘noon’ (to represent when we move into middle age) and for when our body characteristics, such as our voice tones change in the afternoon of life. Jung opined that it is in the psychic realm of midlife, rather than in the physical, that there is more transformation. Some human beings are utterly ill-equipped for the second half of life and often believe that the truths and ideals of the first half of their lives will suffice throughout the lifespan.

An important but apparent contradiction in Jung’s theory is that he believed that it was very important to spend time on one’s self in the second half of life, but that in the first half the opposite was true. The second half of the lifespan should be a time when the self becomes illuminated and that living in the past is a regrettable alternative. Jung asserted that if one carried aspects of the first half over into the second half of life this could lead to problems with the acceptance that his or her life is inescapably coming to an end.

Jung (1933) also noted that most religions promised an afterlife, and consequently people who believed in this, were enabled to live through the transitions into middle and older age with less difficulty. He acknowledged as early as 1933, that the idea of life after death was, however, becoming questionable for some. With regard to immortality, Jung argued that there are opposing viewpoints and little persuasive confirmation of an afterlife, but he was nevertheless convinced that it was healthier to believe that death was an aspiration worth contending with. In other words, faith in the hereafter was healthy and that this has been a belief from ancient times. It also enables individuals to deal with the second half of life with as much determination and direction as the first half.

Jung (1933, p. 116) described the phases of life according to his theory in four stages:

Stage 1. Childhood**.** During this stage we are a problem for others but not yet conscious of any problems of our own.

Stages 2 and 3. Young and middle adulthood. During these stages conscious problems in the second and third quarters of our lives arise.

Stage 4. The last quarter. This stage refers to extreme old age when we descend into the unconscious and once again become a problem for others.

Jung (1933) postulated that during the midlife transition period gradual changes in the character and interests of individuals occur which are often unconscious to them. The individual may have to admit that some of his or her initial life systems that were created are not as a result of rational objectives. Some treasured labours may not have been worthwhile, and aspirations were not realised as s/he had conceived they would be. However, this does not mean that new dreams cannot be created and different life paths taken as well as new interests, new friendships and the formation of new relationships Jung was of the view that problems would arise for the individual who is unable to accept that life does not always turn out as we had hoped or thought it would.

It must be said, in conclusion, that Jung's (1933) theory is, like Freud's (1986) theory, based on his clinical observations of his patients and is accordingly unlikely to represent the general population. Nevertheless, Jung's (1933) ideas and insights into the human psyche in midlife were profound and continue to command great respect and have considerable face value – and, as witness to this, many researchers still quote the aforementioned essay. Jung's ideas are also still of considerable interest to researchers and have been taken

further in the assessment field where the Myers Briggs Type Inventory (MBTI), based on Jung's Type Theory, is the most widely used management assessment tool internationally.

Jung's focus on the midlife transition is the most important attribute of his theory for midlife researchers. This current researcher will investigate some of Jung's assertions regarding the impact of religion, openness, introversion and neurotic personality factors in this current research study.

2.2.2 Erik Erikson's stage-based model of human psychosocial development

Erikson (1950), like Jung (1933), was in his early years a fervent follower of Freud. However, similar to Jung, Erikson departed from strict Freudian thought in that his ideas are described as psychosocial as opposed to psychosexual. Nevertheless, Erikson stayed faithful to Freud's theory of infant and child development of the psyche and included them in his eight-stage theory where he elaborated and built on the first childhood stages of Freud and added three extra adulthood stages. His theory uses bipolar tasks and attitudes for each stage where the individual is required to fulfil the task needs or, if not, a crisis could ensue. According to the Erikson's (1950) Theory of Developmental Crises, a crisis is caused by discord between elements of the psyche, which are compatible with the goals and needs of the ego (referred to as syntonic crises) and turbulent elements, which are not (referred to as dystonic crises). Erikson (1950) posited that when an individual is seemingly faced with emotionally conflicting options in resolving an issue, the syntonic option is positive and leads to growth while the dystonic option leads to degeneration. Notably, Erikson does qualify this theory by asserting that individuals need to experience both 'emotional states' in order to achieve personal growth. In resolving the issue positively, ego virtue or ego strength would emerge (such virtues can also be described as

basic human values). Erikson's values derived from working through the issues are found in Table 2.1 below.

The role of defense mechanisms in Eriksonian theory can be attributed by implication to the influence of Anna Freud (1946) who was his mentor. The influence of Klein (1986) is also apparent where Erikson uses Kleinian terminology such as the reference to unresolved issues of trust from stage one as the cause of lifelong underlying weaknesses in trust which become apparent in adult personalities who habitually withdraw into schizoid and depressive states. His position on the final stages of development is also similar to Jung's (1933) concept of individuation when Erikson (1950) suggests that individuals need to work through all the issues in all psychosocial stages so that when death approaches, the life's tasks are done.

Erikson (1950) sees the ego as attempting to obtain certainty regarding interpretations, singling out memories and regulating endeavours. These attempts are made at a particular time and may well change later in life for that individual. The ego uses unconscious defense mechanisms in order to be able to cope with the environment, that is, the ego needs to deal with the inner and outer worlds of the individual.

Like Jung (1933), Erikson's (1950; 1959) primary focus was not on old age per se, but he argued that all stages of development, including early life, could not be studied without reference to the whole lifespan. His theory thus incorporated all stages of life 'from birth to death' as his students labelled his course at Harvard University (Stevens, 2008).

The eight stages with the adaptive strengths, which emerge after the crisis at each stage is dealt with, are given below in Table 2.1. For example, hope and faith emerge after trust is developed at the end of stage 1. If trust is not

completely developed then residual problems regarding lack of hope and trust may be carried forward for resolution at a later stage including midlife.

Table 2.1 Erikson's eight stages of psychosocial development

Stage	Tasks	Adaptive strengths
1	Trust versus mistrust (during infancy)(Birth to one year)	Hope and faith
2	Autonomy versus shame/doubt (during early childhood)(1 to 3 years)	Willfulness, independence and control
3	Initiative versus guilt (during play age) (3 to 6 years)	Purposefulness, pleasure and imagination
4	Industry versus inferiority (during school age)(6 years to adolescence)	Competence and hard work
5	Identity versus identity confusion (during adolescence)-	Values and sense-of-self
6	Intimacy versus isolation (during young adulthood)	Love and friendship
7	Generativity versus stagnation (during middle adulthood)	Care and productivity
8	Integrity versus despair (during late adulthood)	Wisdom and perspective

Erikson (1950) called his stage theory 'epigenetic' by which is meant that, although the stages are hierarchical, and the next stage is built on the previous stage, it does not replace the previous stage. Each stage represents the sum of all previous stages so that in old age it will be the sum of all stages as well as all the psychological or ego strengths or drawbacks achieved during life.

Coleman and O' Hanlon (2004) argued that at the back of Erikson's theory the principle of crucial juncture periods can be perceived, in the course of

which some adjustment to resilience of the ego evolves. In referring to the psychosocial crises that individuals transcend, Erikson (1950) uses the Greek word – crisis, in its original meaning as a challenge or turning point, as the driving force for development. When Erikson's developmental scheme of the eight stages of man with its crises at each stage was submitted, Erikson (1950) clarifies that he does not postulate that all development stages are crises. What is put forward is that psychosocial development advances by essential steps (essential to being a feature of turning points) from the moment when **deciding between breakthrough, or recession and incapacity**. These remarks could well be the key to unlocking the controversy of the midlife crisis.

Erikson's (1950, p. 251) description of the attitudes of an individual in each of the eight stages is that he means them to be **a perception of,** for example, trust or mistrust – and that such perceptions would penetrate the inner and external world of individuals. Accordingly they are:

- methods of understanding which are reachable by contemplation;
- courses of action or conduct by the individual which can be seen by others; and
- inner states that are out of awareness but can be established by test and analysis.

Erikson's midlife stage is Stage 7 where the issue of **generativity** is found and which is a concern for mentoring the next generation. Where this goal is not achieved Erikson (1950, p. 267) posits that the individual will recede into "an obsessive need for pseudo-intimacy often with a sense of **stagnation**" [emphasis added]. This stage is important as it is a time when the person should be at his or her height in terms of learning and skills and would in all likelihood be responsible for caring for the family including the children. However, Erikson (1950) added an important caveat – the person in this stage

is equally dependent on the younger child, that is, the person in midlife needs to be needed. In taking care of the next generation, the individual becomes enriched and the ego interests are therefore expanded. Failure to fulfil this task, according to Erikson (1950), leads to stagnation and psychological depletion. According to Erikson, this stage is an important tenet of midlife. After the excitement of youthful adulthood and the joy of successfully passing through the intimacy stage, the arrival of children (and particularly when the children themselves reach adolescence) is a period that could well resurrect unresolved issues from Stage 4 or earlier. At Stage 5, intimacy becomes merely a pleasant interlude, as it were, to enable the adult to continue to deal with issues of adolescence.

Within the chronology of theory development on this topic, Erikson (1950; 1959) is probably the most important theorist in describing adult psychosocial development by stages. His stage-based theory is still significant today and has been significantly researched.

McAdam and de St Aubin (1992) researched the Theory of Generativity (i.e. Erikson's 7th stage) and described seven features of generativity, namely:

- cultural demand;
- inner desire;
- generative concern;
- belief in species;
- commitment;
- generative action; and
- personal maturation.

Ochse and Plug (1986) also investigated the validity of Erikson's stage-based theory in South Africa. In particular, they investigated the adult stages of Erikson's theory and found that the stages of identity, intimacy and generativity did not become shaped in the order and at the period in life as

suggested by Erikson. Instead, identity development reached a critical stage after the partial development of intimacy and generativity, which points to the possibility of identity crisis in midlife − if the intimacy stage was not adequately developed.

2.2.4 Late modern stage theorists (1960 – 1980)

Jung (1933) and Erikson (1950;1959) were the best known theorists of the first half of the 20th century insofar as adult development psychology is concerned. However, in the latter half of the 20th century further viewpoints were put forward. Most notable are the views of Gould (1978) Havighurst (1972), Levinson et al. (1978) and Levinson (1996). It should be noted that all of these theorists mentioned above were psychodynamic in their approach and influenced by the views of Jung and Erikson as evidenced by the numerous quotes from these two theorists. However, they are probably better known as stage theorists and are thus dealt with in this section.

2.2.4.1 Levinson D., Darrow, Klein, Levinson E. and McKee (1978)

The main basis of Levinson et al's (1978) views are that the life cycle consists of transition periods of some four to five years during which the individual must carry out tasks which will enable him or her to change life structures. Levinson et al's ideas are labelled as views rather than as a theory since they are really an expansion and explication of Erikson's (1950) theories. Levinson et al (1978) postulate that the transitional periods are followed by stable periods of six to 10 years where the new structure is expanded. The transition is the link or demarcation between static spells.

Levinson et al's (1978) views have been subsequently criticised (Farrell & Rosenberg, 1981; McCrae & Costa, 1986) the main foci of this

criticism being, against the alleged assertions by Levinson et al. (1978) that:

- Some form of crisis is normative;
- There are very specific ages at which this occurs; and
- The personality changes during midlife.

It is argued by Levinson et al. (1978) that the idea of a developmental life cycle signifies a predicate of a fundamental and ubiquitous system with never ending communal and individual differences. The basic sequence of the life cycle is, however, the same and includes stages or 'seasons' (Levinson et al 1978, p. 6). Levinson et al, also averred that each stage is different from the previous and following stages. The developmental period which Levinson et al. (1978) focused on in their research was the ages incorporating the late teens to the late forties. They proposed eras (a time of life) in the life cycle such as early adulthood (ages 17 to 45 years) and middle adulthood (ages 40 to 65 years). Levinson et al. acknowledged that they did not start out with a highly defined concept of a transition at midlife but this emerged during the course of their research. The shift in eras, they claimed, was not marked by a concrete event or fundamental development change such as events taking place in puberty. They rather claim that events such as divorce, depression, illness or empty-nest syndrome occur at different ages and for different reasons and thus do not provide the basis for a generalised view on aging– neither do biological changes. However, they found that by examining the whole lifespan and looking at particular segments, the eras in the life cycle became apparent.

Levinson et al. (1978) are of the opinion that although instinctual youthful drives such as passionate ardour, a high faculty for rage, a commanding presence, and aspirations for progress were not reduced in midlife, the

individual suffered less from the harshness of such compulsions during midlife.

Levinson et al. (1978) preferred the term ‘midlife transition’ to ‘midlife crisis’ because they acknowledged that many individuals have only a mild transition and they suggested that the term ‘midlife crisis’ should be used only for circumstances with significant turmoil and disruption. Furthermore, they do not see that having a crisis in midlife was necessarily pathological. Some degree of crisis may present an opportunity for personal development, while failure to deal with the transition can lead to stagnation and decline. The development tasks of the midlife transition must be accepted by the individual to prevent this stagnation and decline. It is also asserted by them that the process of working through the issue of personal death goes right through the whole midlife period and is never completed. In addition, Levinson et al. (1978) raised the possibility that those individuals who go through the transition period without discomfort may well be denying that their lives need to change.

Levinson et al. (1978) emphasised the importance of the concept of generations which they believe are inadequately understood and seldom used. People regularly speak about their generation and usually include people of within a range of five to seven years as being of their own age. Yet, there are no accepted standard definitions of generations. There are, however, popularly accepted definitions of the term generation such as the ‘Baby-Boomers’ (born 1945-1964), ‘Generation X’ (born 1970-1985) and ‘Generation Y’ or the ‘Millennials’ (born 1995-2010).

Levinson et al. (1978) furthermore emphasised the impact of the midlife transition on the issue of work or career. They submitted that, regardless of the outcome of youthful efforts, individuals will assess their advancement at the midlife transition stage. The questions usually asked are: What have

I done? Where am I now? Of what value is my life to society, to others and especially to myself? Have I achieved my dream or vision that I had of myself as I neared the end of adolescence?

According to Levinson et al. (1978), it is no coincidence that certain significant events also take place when reaching years of the late thirties to early forties. These events feature promotions or failures in the work situation, difficulties or satisfactions in family life and death or illness of loved ones, particularly those of the older generation. Since these events often act as culminating triggers that provide a focus that a turning point has been reached, it often initiates midlife transition. It may, for example, result in the first time the man has cried since his childhood. Levinson et al. also make the point that the same event at a different time will not necessarily have the same impact.

As stated earlier, Levinson et al. (1978) emphasised occupation and family as central themes in their theory and they submitted that the adult self needs to be included as it engages with social institutions such as the workplace and family (i.e. the person is in society and society is in the person). This interconnectedness is an essential part of a conceptual model of midlife transition and crisis to be found in Chapter 3.

According to Levinson et al. (1978) the primary tasks of the transition periods are to:

- interrogate and re-examine the present life framework;
- probe this framework for possible alterations in the self and environment; and
- advance in the direction of a new life framework.

Levinson et al. (1978) submitted that during the midlife transition phase the individual is in both the early adulthood and middle-age eras. This is so

that the individual can take what has been learnt from the one era to the next. Levinson et al also interpreted the changes taking place in terms of an object relations paradigm, for example, the loss of a partner to divorce or death leads to feelings of abandonment, grief and rage. However, over time, the lost object becomes internalised so that, although the external object is lost, the relationship with the now internalised object can be maintained.

The features of the midlife transition, according to Levinson et al. (1978), are concerns about:

- the loss of youth;
- the assumption of a more senior position in one's world;
- the reworking of inner conflicts; and
- some preoccupation with death.

Where Levinson et al's (1978) theory differs from most other stage theories is their assertion that each transition period is followed by a stability period where the individual needs to build and develop the life structure for the particular era. For instance, they posit that the midlife transition– which they claim takes place at ages 40 to 45 years– is preceded by an attempted settling-down period. This time period in the person's life is such that they would have built a substantial life for themselves and at the late thirties, the re-evaluation commences and the associated perception is created that not all is right (Levinson et al., 1978). This feeling seems, however, to be more one of being stuck (Butler, 2007) as a fateful decision needs to be made: Do I stay where I am or do I leave? This need to 'leave' is not only external (from the job or marriage) but also internal (from the revisited inner child who has unresolved issues from adolescence).

Levinson et al. (1978) further asserted that the midlife transition brings about significant changes in the internal aspects of the person. Social outlook and personal values may change significantly. Moreover, seemingly small and less obvious but important changes in the person's life may have had a substantial effect on the individual, such as changes in technology at work, parents who are more dependent, or small demotions at work. Consequently, inner changes may be consciously expressed or hidden and while all of these polarities exist during the entire life cycle, they function with noteworthy power during the midlife transition.

Most significantly, Levinson et al. (1978) claimed that almost 90 percent of their research subjects were involved in raging conflicts (both internal and external) and they emphasised that some men appear on the surface to have undisturbed transitions but could be processing conflicts within, with the outcomes only being seen later. By contrast, some are able to handle the conflicts without disturbance at all. It is anxieties, guilt, dependencies, animosities and vanities of earlier years that keep some midlife individuals from modifying their life structure. The reappraisal of life structures cannot only be rational and intellectual but involves emotional turmoil, despair and stuckness. The current researcher notes that although earlier Levinson et al. preferred the term midlife transition rather than midlife crisis, what they described as 'raging conflicts' seem more a crisis than a mere transition.

Levinson et al. (1978) continued to deal with the work situation by emphasising that most organisations, being hierarchical, have one senior manager to 10 or more middle managers. Clearly, it is impossible for the majority of people to reach the top position and the majority are therefore likely to feel dissatisfied with their progress at work**.** A crucial turning point is when the realisation occurs that s/he will fall short of her or his dream. This either leads to changes in job, or to another occupation, or a

partial withdrawal of interest in the existing job but, at the same time, doing well enough to retain employment. In this way, the tyranny of ambition and the dream of competitiveness is moderated to the extent that midlife becomes more tolerable. In addition, Levinson et al. (1978) concurred with Erikson (1950; 1959) that being generative by being a mentor to younger adults is one of the most significant relationships in middle adulthood.

Marital difficulties in midlife can lead to separations, divorce or to improvement by working through the difficulties. This, according to Levinson et al. (1978) is due to differing development rates and often marital problems that were always present but which then become unbearable in midlife. McCrae and Costa (2003) have since disputed this and claim that the divorce rate in the USA is higher among young people than among people in their middle years.

In fact, since the publication of Levinson et al.s' (1978) theory, it has been widely questioned, particularly in two respects: their view that almost all people will have some form of transitional challenge, and the assertion of very specific chronological time periods when each development phase occurs. The generational cohort used by them for their research were subjects from the pre-Baby-Boomer generation (the so-called Silent or Veteran generation) who were in middle age in the 1960s.

Further criticism of Levinson et al's. (1978) work is related to their research design and methods as being limited and for not being in keeping with sophisticated social science methodology (Wrightsman, 1994). The samples were alleged to be too small to be able to make the inferences that they did, and also the interview technique they used was believed to be a flawed method of collecting data (McRae & Costa, 1990). Levinson et al. (1978) acknowledged that their sample was too small to prove any

hypothesis and acknowledged that using only men in the sample was not desirable, but this was due to lack of resources. They nevertheless believed that some significant conceptions and speculative approximations could be initiated. Consequently, it is submitted by the current researcher that their ideas ought not to be rejected in totality as some authors such as McCrae and Costa (2003) suggest. This view of Levinson et al.'s work is also supported by McAdams (1993).

Further critique of Levinson's findings will be dealt with in later sections in this chapter where the differences between Levinson's views and other theorists is elaborated upon.

2.2.4.2 Daniel Levinson

Daniel Levinson (1996) made two specific assertions about the development stages of women from research he conducted later on, namely:

- Women go through the same sequence of eras as men and at the same time; and
- Gender splitting occurs where there is a sharp division between men and women.

Gender splitting is, according to Levinson (1996) indicative of:

- rigid distinctions between men and women in the culture and individual psyche;
- distinctions in the domestic and the public occupational worlds;
- roles of man as husband/father/provider and the woman as wife/mother homemaker; and

- the male as authority figure and head within the occupational domain.

Levinson (1996, p. 45) acknowledged the changes that were taking place during his research project due to the ‘gender revolution’ where the meaning of gender, the place of men and women in society, and relationships between men and women were being transformed due to what he termed ‘the social evolution of the human species’. According to Levinson (1996) many women are employed in jobs such as typing, clerical, sales and services involving little occupational training and without any long-term career paths. These jobs are regarded as women’s work and are in a sense similar to the positions that women occupy in the traditional family.

In South Africa it could be said that these positions now have an additional layer in that they are no longer occupied in the main by white women but by African, Coloured and Indian women (Employment Equity Commission of South Africa Report, 2007, pp. 7-10). In this case, gender splitting could be said to be replaced as such by racial gender splitting. The reasons for this are, on the one hand, probably due to pressure to appoint people other than white to redress past unfair discrimination, which is a constitutional and legal imperative. On the other hand, it could also be said that because women are a separate category of people and disadvantaged by unfair discrimination in the past, some progress could be claimed if white women were appointed to higher level positions. This means progress on the gender front but not on the racial front. The statistics (Employment Equity Commission of South Africa Report, 2007) nevertheless show that progress has been made in bringing more women into higher level jobs previously occupied by men. The percentage (20%) is, however, still much lower found in than the population where over 50% are women and much more needs to be done.

According to Levinson (1996) the so-called ‘higher level’ traditional female occupations such as nursing, teaching and social work were still predominantly filled by women and these positions had to do with propagating the young, looking after the sick and supporting the impoverished and deprived, which again has a great deal in common with the traditional homemaking functions even though they are in the public sphere. However it must be stated that this state of affairs has changed significantly in South Africa since 1996 with the implementation of the Employment Equity Act. This legislation created national imperatives to eliminate unfair discrimination against females in the workplace and compulsory affirmative action aimed at increasing the number of women in all levels and categories of employment.

Levinson (1996) emphasised the main events that activate changes or turning points for women (similar to men) are for example a promotion or demotion at work, the conclusion of a major project, a change in marital status or life circumstances,; or a geographical move. Alternatively, the event could be almost unnoticeable or not grasped even by the person herself. The event, according to Levinson, may act as a catalyst to introduce the midlife transition. Levinson stated categorically that his findings indicate that both women and men go through this phase of entering midlife. Levinson is, however, of the opinion that the struggle for women is against being cast as a little girl (not just a child but a girl), that is, she wants to become an adult in a gender-linked sense. In Levinson’s view, this is the fundamental difference between men and women as men have only to transcend the child to adulthood aspect.

In his research, Levinson (1996) distinguished between the midlife transition experience of the business and academic career women on the one hand and that of the homemakers on the other, although he postulated

that for all women in the study the midlife transition got under way at the age of 40 or 41 years of age and ended at age 45 or 46 years. In distinguishing between women who fulfilled roles as homemakers and those who were career women Levinson noted that during the midlife transition the core issue for homemakers was that care-giving was no longer the chief function in life. The two prominent themes which can often be distinguished in this regard were the desire to become more carefree and the right for a woman to be herself. Some women felt that there was an imbalance between what they had given and received and that a better life did not exist. Levinson (1996) claimed that most of the participants in his research sample went through a 'low' experience of life and marriage during the midlife transition. The feeling women in the study often experienced was that their marriage was stagnant and that they were trapped.

2.2.4.3 Roger Gould

Gould (1978), in researching the aging process, concluded that certain key events seemed to take place in everyone's lives, such as, the purchase of a house, the purchase of the first motor vehicle, the first job, the birth of the first child, as well as the experience of the death of a parent, and the first signs of aging. According to Gould, such events often bring the realisation that the individual determines the way his or her life will be lived. Gould (1978) postulated that most adults had experienced some childhood difficulties as they learnt to cope with the world and this often resulted in unresolved pain and hurt which needed to be worked through in adulthood. If not dealt with, it sometimes interrupts one's adult life and leads to a complication of human connections and unsettles the self-perception.

Gould (1978, p. 220) opined that during midlife, people lose the last remnants of the 'protection of their parents' and midlife individuals also conclude that they are more dominant than their parents who now have easier lives, do not work and no longer have the command they once had.

Another assumption postulated by Gould (1978) is that one of the most important aspects of midlife is the issue of death which usually becomes the central issue for individuals in this stage when parent/s of the midlife individual become very ill or die. Gould, similar to Kübler Ross (1969), submitted that mourning of a parent, particularly at midlife, follows stages where a procession of denial fluctuates with spells of grief. The denial enables the individual to clear themselves from grief but according to Gould leads to a reduction in zest until the grief is finally worked through Furthermore, the individual needs to experience the pain of mourning to enable him or her to 'stay in touch' with themselves (Gould, 1978). According to Gould, the experience of distress brought about by parental mortality can also be triggered by feelings of reduced power with children, the position at work, or physical deterioration. Gould's (1978) reference to unexpected intense anxiety or self-damaging conduct as being symptoms of these experiences is a clear analogy to the midlife crisis.

Gould (1978) distinguished between men and women's reaction to the reality of mortality when he submits that men find death and impermanence to be more astonishing than do women. Moreover, men are more apprehensive about death and often misconceive workplace achievement as providing indemnity from dying. The misconception of this fantasy will have to emerge in midlife. This awareness, in turn, leads to the disappointment with what has been achieved especially in comparison with earlier aspirations. A sense of failure and

worthlessness can follow, but when it is realised that despite whatever or however we have achieved, we will nevertheless die, the process to grow is opened.

Gould (1978), sees work as an initial protective device since new entrants to the workplace in their twenties are able to bury childhood difficulties in the new world of work that they enter. Growth and success seem to be everything – the higher we go in the organisation the bigger we get and the bigger we get, the closer we get to invulnerability. However, in midlife this illusion becomes apparent when it is realised that work success will not make the person invulnerable to sickness, personal problems, death, alcoholism or neurosis. This awareness, according to Gould (1978), leads to the transformation of the meaning and motivation of work. Work can also become a means to express talents and capacities and to be part of an organisation that expresses a theme near to our essence.

Gould (1978) assumed that midlife is a time of difficulty making decisions between an internally experienced feeling of lifelessness, and the knowledge that the only way out of this is perhaps to change occupations or professions. This is especially so when there is no apparent junction between our occupation and the things which we are passionate about. This striving for authenticity leads automatically to generativity, as theorised by Erikson (1959).

Women, according to Gould (1978), often have to deal with the outdated version of femininity which posits that a woman can only exercise power indirectly through a man. The underlying assumption is that women cannot exist without someone to defend them (that is, a man). It is uncertain whether this conception is still valid in 2015 especially at management levels.

Gould's (1978) fourth assumption for midlife relates to the family. He averred that marital issues such as sex need to be re-arranged, parental embarrassment and the censorship of ardour results from the period of child-raising and such avocation is usually reduced by midlife followed by a necessity to consider new sources of excitement or sensual domains. If the related issues are not worked through they may lead to infidelities, separation or divorce.

The last assumption to be dealt with in midlife, Gould (1978) argued, is the presumption that we have no faults. Midlife individuals often become aware of negative aspects of their persona such as avarice, malice, revenge, reproval, and resentment which leads to the acceptance that we are not as righteous as we thought we were. These feelings of one's own lack of innocence are characterised by Gould as resulting in a need to learn how to contain such feelings and this requires self-renewal. The major religions would, in some cases, regard these feelings as 'deadly sins' which could also lead to strong guilt feelings for deeply religious people.

2.2 MODERN ERA MIDLIFE THEORISTS

Although Jung (1933) and Erikson (1950), and to a lesser extent other theorists such as Gould (1978), Levinson et al. (1978) and Daniel Levinson (1996), dealt with midlife issues, this aspect is regarded by them as part of a larger complete lifespan development from cradle to grave, as it were. In the mid-1960s two theorists namely Jaques (1965) and Neugarten (1968a) focused more specifically on midlife aspects in their theories.

2.2.1 Bernice Neugarten

Neugarten is regarded as a pioneer of the psychology of aging and was a distinguished scholar for 40 years at the Centre for Aging at the University of Chicago (Janega, 2001). She was probably the first researcher to place particular emphasis on midlife as a neglected but very important part of the lifespan. She was the author and co-author of numerous articles and several important books, including *Society and Education* (1957), *Personality in Middle and Late Life* (1964), *Middle Age and Aging* (1968a), *Adjustment to Retirement* (1969), and *Social Status in the City* (1971).

Neugarten (1968c) defined midlife as:

> The middle years of life; probably the decade of the fifties for most persons represents an important turning point with the restructuring of time and the formulation of new perceptions of self, time and death. It is in this period of the lifeline that introspection seems to increase noticeably and contemplation and reflection and self-evaluation become a characteristic form of mental life. (p. 140)

Neugarten and Guttmann (1968) did a study on age-sex roles and personality in middle age and the findings of this study led them to believe that the personality changes from the ages of 40 to 70 years (for example, women seem to be more accepting of the quarrelsome and self-absorbed impulses).

Neugarten (1968c) also found, in other research, that re-examination of the inner being in midlife was a dominant theme but that higher socioeconomic and educational level individuals were endowed with higher comprehension regarding the changes that had taken place in their work situation, families, and their inner and outer worlds. Neugarten observed a common perception of research participants is that middle age was a particularly distinguishable time in the life cycle which contrasted appreciably from other age periods.

The concept of the timing of life events (being on-time or off-time) emerged from Neugarten's (1968b) research. Being on-time meant that the occurrence of a life event such as marriage took place at the expected time. In addition, the difference between the person's career expectations and career achievements was introduced by Neugarten (1968c) and she suggested that the questions one should ask are: Are you late, early or on time? Being late could create problems such as anxiety or impulsive decisions. Neugarten also mentioned another aspect with regard to the issue of time namely the changing time perspective which occurred in middle age. According to her, the time perspective at midlife changes from time since birth to time until death.

On the positive side, Neugarten (1968b) regarded middle age as a time of greatest capability to cope with considerably complicated surroundings and a decidedly contrasting inner being. She also suggested that the middle-age period was better defined in terms of status in different domains rather than by chronological age, which is also the view of Lachman (2001).

As far as changes in personality in midlife were concerned, Neugarten (1968c) proposed that men seemed to express an increased need for affiliation whereas women became more aggressive and self-centred. Men, it was suggested, seemed to cope in an increasingly non-concrete and rational manner whilst women coped in increasing emotive and demonstrative terms.

These changes were named as “interiority” (Neugarten, 1968c, p. 140) which she suggested took place predominantly in middle age (i.e. ages 35 to 60). The term interiority is referred to by many authors such as Clausen (1993); Gould (1978); Lachman (2001); Levinson et al. (1978) McAdam (1993). McCrae and Costa (2003, p. 14) in fact refer to interiority as “some intrapsychic process not readily observable to an outsider”.

2.2.2 Elliot Jaques (1965)

Although Neugarten’s (1968a; 1968b; 1968;c) volume of work regarding midlife was the largest of the two dominant theorists of the 1960s, Jaques (1965) is probably the more popularly known for using the words ‘midlife crisis’ in his seminal essay *Death and the midlife crisis*. The term’s popularity has been sustained to this day particularly in the popular psychology field where numerous books have been written and many films made about the so-called midlife crisis. Jaques’ article is also widely quoted in most academic articles on the midlife transition and midlife crisis.

Jaques (1965) suggested that the reactions of the people involved in his research varied from a severe and dramatic crisis to a smoother and less troubled transition in midlife. Jaques accordingly, was saying that the intensity of the crisis varied when, on the one hand, some people have a highly intense experience−even death – and, on the other hand, others hardly experience any crisis at all. This is entirely in line with current thinking on the phenomenon of midlife crisis.

Jaques (1965) also posited that late adolescent and early adult idealism are given up during or after the midlife transition and are replaced by a more contemplative pessimism. Jaques sees the midlife crisis as a depressive crisis in contrast to the adolescent crisis which he submits is more a paranoid schizoid crisis. He observes in this regard that the outcome of serious

breakdown during adolescence is schizophrenia while in midlife the predominant outcome of serious breakdown is depression. Jaques (1965) posits that it entails the re-working through of the infantile depression but with the mature outlook in midlife regarding death and destruction.

A key part of Jaques' (1965) theory is the need to recognise two features of human life namely the inevitability of death, and the existence of hate and destructive impulses inside each person. In early adulthood these features are unconsciously denied until, at midlife, they need to be explicitly recognised and brought into focus. If this can be achieved, Jaques (1965) believed that the midlife crisis could be weathered and mature adulthood achieved. For creativity to continue after the midlife transition period, it is necessary for the depressive position to be worked through at a qualitatively different level. The successful outcome had to be the constructive resignation by the person of both the imperfection of man and the acceptance of the shortcomings of one's own work. This constructive resignation could lead to serenity in life and at work.

Although Jaques' (1965) theory on the midlife crisis was based on examples of creative geniuses such as composers Bach Chopin Mozart and Rossini and artists Raphael and Goya, he submits that the midlife crisis is a reaction that not only occurs in a creative genius but is seen in everyone in some form or manner. Jaques' views on the psychological nature of this reaction and how this could be explained are that the arrival at the midpoint of life is chronologically a simple fact but not as simple psychologically, since:

- the individual has to move from a state of growing up into a state of beginning to grow old;
- new external circumstances have to be met;
- the first phase as an adult (young adulthood) has been lived;

- families and work profession or occupation have usually been established;
- parents of the individual have grown old with some of them dying and at the same time the mid-lifer's children are at the turning point of entering adulthood; and
- one's own youth and childhood are long gone and demand to be mourned.

There is an apparent paradox in midlife in that that one is entering the prime of life but at the same time this stage is limited as death lies beyond. The reason for this is that consciously, for the first time, death changes from being a general conception or an event involving the death of someone else, to a personal matter – one's own death. Jaques (1965) also noted that young adults, before the midlife encounter with death, do not need to work through the depressive position as this can be postponed as it is not a pressing issue. At midlife, however, the midlife crisis is the depressive anxiety about death being thrust forward with great intensity. According to Jaques, if the inevitability of death is denied, rejected or pushed aside then the life still to be lived by that individual will be experienced as a time of psychological turmoil accompanied by depression.

One of Jaques' (1965, p. 506) midlife patients working through depression aptly described the matter as follows:

> Up till now life has seemed an endless upward slope, with nothing but the distant horizon in view. Now suddenly I seem to have reached the crest of the hill, and there stretching ahead is the downward slope with the

> end of the road in sight − far enough away it's true, but
>
> there is death observably present at the end.

Jaques (1965) asserted that humans have an unconscious wish for immortality and lives are often lived by denying mourning and death. This is done by ideas of reincarnation and life after death, or future longevity, or finding cures or elixirs to prevent aging. Such ideas arise as a response to anxiety about death and as a defense against them.

Familiar patterns in midlife were seen by Jaques (1965) in many people (some of which still resonate today), namely:

- compulsive attempts by those reaching middle age to remain young;
- high emphasis on health and appearance;
- the development of sexual permissiveness to recapture youthfulness and power;
- lack of genuine enjoyment of life; and
- religious concern.

Jaques (1965) believed that if the depressive position was worked through, the death of the old self would need to be mourned, but the newly created object in midlife is created as giving life back. In other words, we can live with the inevitability of our own mortality without an overpowering apprehension of punishment. Genuine values can be cultivated such as wisdom and fortitude. This enables what Jaques refers to as the boundless ability to redirect our lives which comes with acceptance and dispassion.

2.3 OTHER LATE MODERN ERA MIDLIFE THEORISTS

Erikson (1950) had proposed, and this belief was held by many even in the late modern era period that the stages of the lifespan were universal and, if not, the transition difficulties including those at midlife were universal or inevitable (Becker, 2006; Clausen, 1998; Ellman, 1992; Guttmann, 1987; Julian et al., 1990; Levinson et al., 1978; Snow, 1990; Vaillant, 1977).

The view of an inevitable midlife crisis was subjected to considerable research and criticism during the 1980s particularly the earlier assertion that personality changed during midlife as a result of or a cause of the crisis (McCrae & Costa, 2003). The more general view that midlife transition difficulties or crises was universal (normative) and linked to chronological age was also the subject of much wider criticism on the basis that this assertion by earlier theorists had little empirical basis (Cooper 1977; Farrell & Rosenberg, 1981; McCrae & Costa, 2003). This critique, it should be remembered, took place during the 'paradigm wars' of the period (Bergman, 2009). This facet will be dealt with in Chapter 4 in the discussion on qualitative and quantitative methods of research.

Kruger (1994), while also critical of the alleged existence of midlife crisis, does however, cite Carlsen with apparent approval and submitted that there is general agreement on the efficacy of Erikson's Stage-based Development theory in cognising the overarching field of adult development.

The coining of the term 'midlife crisis' by Jacques' (1965) brought about enthusiastic research and in particular further development of stage theories in the 1970s. Levinson et al. (1978) and Gould (1978) were probably the most well-known of these new theorists at that time.

2.3.1 Lois Tamir

Tamir's (1982) research occurred on the cusp between the modern and postmodern periods of developments in the psychology of midlife and her data were based on a national representative sample in the USA (Veroff as cited in Tamir, 1982). Tamir was the first researcher to examine how middle-aged men differed from those younger and older. She had similar views to many postmodernists who were of the firm view that there was a need for a scientific study of the phenomenon− so implying that earlier work was not sufficiently scientific.

Tamir (1982) regarded middle-aged people as a special population because they were neither young nor old and were the most powerful and wealthy group, who accordingly contributed the most towards maintaining the structure of society. In this regard she acknowledged Neugarten's assertion that middle age brings appreciation of this daunting obligation (Tamir, 1982). Juxtaposed against this was the increasing recognition of particular stresses that accompany this phase of the lifespan as it is during this period that unique problems are confronted, such as reassessment, career evaluation, launching children, handling flawed bodies and accepting death.

Tamir (1982) cited several researchers and theorists (for example Drevenstedt, 1976; Fried, 1976; Jackson, 1974; Jung, 1933; Levinson et al., 1978; Soddy, 1967; Vaillant, 1977) as authorities for the site of midlife changes occurring during the ages 40 to 49 years. Tamir (1982) mentions three domains where tension is felt namely the inner and outer world of the individual, their work experience, and social relationships. These are three key areas that will also be investigated in this current research study.

Tamir (1982) did not study women as there was, at that time, insufficient scientific literature regarding midlife transition for women and, moreover, she

was of the view that the life course of women seemed to follow different paths (Lowenthal et al., 1975; Mancini cited by Tamir, 1982).

Regarding the issue of midlife crisis, Tamir (1982) referred to her literature review and accepts that something incomparable takes place with men as they enter middle age. This postulation is based on studies of the whole lifespan, as done previously, which had revealed a change in attributes among the middle-age research subjects.

Tamir (1982) cites Farrell and Rosenberg's conclusion that the reluctance by men to express anxieties and personal doubts as a feeling that, as accountable adults, they are not allowed to express these concerns as they must be the 'rock' of stability for the old and young in their lives. Of significance, she also posited that self-confidence is the most important value chosen by subjects assessed at ages 30-49 years (Rokeach cited by Tamir, 1982).

After conducting a review of the literature at the time of her research on all aspects of midlife Tamir (1982) concluded that the midlife transition period is a unique time in the adult life of the male. Clear inferences from the literature relating to the quality of life experience, work, family and social relationships of middle-aged men were, according to Tamir , lacking and her study was accordingly focused on these domains. Tamir's view was that the midlife transition period was between ages 40 to 49 years. Her research involved comparing men in their midlife transition (aged 40 to 49 years) with younger men (aged 25 to 39 years) as well as older men (aged 50 to 69 years). She accounted for social class by controlling the education level, which she stated, had been suggested by some researchers as correlating closely with social class. This current research study will make comparisons between the same age and social class groups as used by Tamir.

Tamir's (1982) exploratory study was an attempt to define the changes in midlife transition concerning, quality-of-life experience, work, family and social relationships. She structured the study so that the first and most important questions were about quality of life experience during midlife transition. The other domains such as work were examined separately on their own as well as their contribution to wellbeing.

2.3.1.1 Quality-of-life experience

Tamir's (1982) definition of quality of life experience included an assessment of wellbeing, time orientation, and values as they changed in the midlife transition period. The measures Tamir used were:

- internal psychological state (happiness, satisfaction, zest and self-esteem);
- psychological and physical symptoms (immobilization, drinking problems, anxiety and physical ill health);
- sources of life satisfaction (leisure, work in/and around the house, work, being married and being a father);
- time orientation (past and future); and
- value orientation (value choice).

Tamir's (1982) research findings with regard to the above were that:

- College-educated men in their late forties displayed more internal psychological distress when compared with other periods in adulthood. They lacked zest, expressed symptoms of immobilization and drinking problems, had different perceptions of ill health and the possibility of a nervous breakdown at some time. Furthermore, all those in midlife transition revealed greater interrelatedness between the aspects

of wellbeing than other groups. Tamir however, interprets these findings as indicating increased introspection at midlife namely, the internal assessment of one's life and achievements and location in the community. This inner process, Tamir posited, is difficult and may prevent the individual from employing vitality outwardly until the internal assessment is complete in a satisfactory manner.

- Men in their late forties with less education experience a drop in self-esteem.
- Non-college men in their late forties experience increased job satisfaction, but both groups experience plummeting satisfaction from their roles as marriage partners and as parents. Life satisfaction then peaks at the late forties.
- Time orientation for all participants alters for men in their forties. Their experience was that less is expected from the future and the past is not viewed as less happy. Tamir suggested that this was caused by introspection at this age.
- Value orientation transformed where self-respect becomes a most valued goal. Warm relationships also come to the fore and Tamir suggests that this is due to the re-appearance or re-emergence of a concealed need for affiliation.

2.3.1.2 Work at middle age

Tamir (1982) examined job satisfaction, work commitment, perceived job autonomy, perceived job performance, perceived job relations, and motives at work to measure the place of work in men's lives.

In this regard, Tamir's (1982) findings are that there were ever-present indications of transition at middle age and for both education groups she found evidence of transition in the results for job satisfaction, autonomy

and social connecting at work. Tamir's theory was that this was caused by the fact that it becomes apparent to men that success and status peak at middle age and further advancement is unlikely. Men in their forties need to convince themselves of these facts, especially if they have not achieved what they thought they would. Finally, she found that the higher education level men expressed a higher need for power in their late forties than the less educated men. In terms of the role of socially connecting at work, Tamir found that the college-educated men's affiliation motive was more highly related to job satisfaction at middle age. Furthermore, she found that the less the interactions with others, the lower the job satisfaction. A further important finding was that for job satisfaction to flourish, the enriched social relations had to be complemented by competent work on the job. This enables the distribution of proficiency and the enjoyment of socialising. An unexpected result of Tamir's study was that in midlife, job satisfaction did not correlate with wellbeing. Her theory as to what caused this was that by the time of transition to middle age, work was less important to self-fulfilment than in earlier adulthood stages.

2.3.1.3 Family at middle age

The children of men aged 40 to 49 years are in the process of becoming independent of their parents and wives are changing from their primary role of caretakers in the family. Accordingly, family life will transform and men in their forties need to cope with these changes. Tamir (1982) used parenthood and marriage as the variables to be measured and found that emphasis on the parental role diminished and sensitivity to the marriage role increased in middle age for college-educated men. This did not mean that midlife men were more or less happy, but that if the marriage was unhappy then this would constitute a greater threat than at other ages. Moreover, a happy marriage at this stage was more

capable of enhancing wellbeing for college-educated men in their forties than for other age groups.

2.3.1.4 Social relationships at middle age

Tamir (1982) suggested that relationships with others is the least studied area in the lives of men. The variables she used in this regard were neighbours, friends, relatives, and social connectedness. Tamir's findings were that a simple comparison between age groups did not show any differences in the numbers of friends, neighbours and relatives known or interacted with. The only difference found was in the variable of social connectedness: for non-college educated men in their late forties there was a significant relationship between self-esteem and social connectedness – the lower the social connectedness the lower the self-esteem. She concludes that middle aged men seem to understand that they have a need for support and will be more likely to share their problems with others. This will be investigated by the current researcher by measuring the extent that people in middle age use the coping strategy of **seeking social support**.

2.3.2 McCrae and Costa

In the mid-1980s criticism of stage theories of human development and in particular the views regarding the midlife crisis started to emerge. McCrae and Costa (1986) as personality trait theorists, for example, were of the firm view that the big five personality traits are stable over time and do not change. The big five personality traits postulated by them are extroversion, neuroticism, openness to experience, agreeableness and conscientiousness. Each of these traits was, and still is, seen as being on a continuum with their bipolar opposite traits at the other end of the scale, for example, extraversion versus introversion.

McCrae and Costa (2003) cited considerable empirical research into the so-called midlife crisis issue and stated categorically that they found no evidence that everyone experienced a midlife crisis (Cooper, 1977; Farrell & Rosenberg, 1981; McCrae & Costa, 1988). Moreover, McCrae and Costa (2003) argue forcefully that personality is stable during adulthood and that these conclusions were reached with data using quantitative empiricism.

McCrae and Costa's (2003) position with regard to personality change in middle adulthood seems to be diametrically opposed to the theories expounded by Erikson (1950, 1959); Gould (1978) Jung (1933); Levinson et al. (1978) and Neugarten (1968c), who all included change as the core of their theories and seemed to imply changes in aspects of personality. For example, McCrae and Costa (2003, p. 12) cited Jung's (1933) theory according to which the functions of the personality such as 'anima' and 'animus', the 'persona' and 'shadow' had to be integrated for individuation to be complete. This, McCrae and Costa stated, infers that distinct personality attributes of youthful adults would change with the aging process. In this regard, Levinson et al.'s (1978) theory of changes in the life structure to include personality, career, marriage and other relationships is also cited (McCrae & Costa, 2003). One of the reasons for this difference of opinion, according to Costa and McCrae (2003), is that trait psychology in the 1970s had become somewhat obsolete but in the 1980s trait psychology returned powerfully and is presently the dominant model in personality psychology.

According to McCrae and Costa's (2003) trait model of personality, five personality traits are found in varying degrees in all people. These traits are:

- extroversion versus introversion,
- neuroticism versus emotional stability,
- openness to experience versus down to earthness,

- agreeableness and disagreeableness
- conscientiousness versus laziness.

Each of the above traits consists of a number of facets, for example, anger and anxiety are facets of Neuroticism, The five traits in all humans and across all cultures has been established by considerable empirical research. The fact that the set of traits in any given individual is also stable after age 30 is of particular importance. McCrae and Costa (2003) stated that the Five Factor Model has become widely accepted as an adequate taxonomy of personality traits or basic dispositions.

McCrae and Costa (2003) posit that personality traits are stable over time whilst acknowledging certain aspects related to personality that can change during adulthood namely:

- physical
- self-concept,
- social roles
- attitudes and values
- interpersonal relationships

The above aspects all join in shaping the choice of a particular word, act or emotional reaction. McCrae and Costa (2003) then posit that trait psychology enables researchers to establish in the long run how people will generally act. All the major midlife theorists such as Erickson (1959, 1959) Jaques (1965); Jung (1933) and Neugarten (1968c) include personality as an important aspect. There is therefore no doubt that the personality of individuals' plays a very significant role in adulthood and it is submitted that no investigation of midlife transition and crisis would be complete without examining the role of personality in midlife transition and midlife crisis.

2.3.2.1 The measurement of personality

McCrae and Costa (2003) submit that the personality traits and other personality aspects mentioned above do have an impact on the midlife transition and possible crisis of individuals and accordingly these traits and aspects need to be measured in this current research study. The NEO-PI (Neuroticism, Extraversion, and Openness Personality Indicator) which measures three personality factors, was designed by McCrae and Costa (2003) and being a self-report questionnaire is the least expensive, reliable, and least time-consuming method to measure these personality traits. While it is acknowledged by McCrae and Costa that the criticisms of behaviourists that paper and pencil tests cannot be a substitute for observations of real behaviour, the psychodynamic theorists moreover assert that there is a tendency to present socially desirable answers. However, McCrae and Costa nevertheless argue that this method of measurement is the most practical and more accurate than projective techniques. McCrae and Costa (2003) claim that research has shown that the most accurate data is collected by means of self-reports complimented by spouse reports.

2.3.2.2 Critique by McCrae and Costa (2003) of Levinson et al. (1978) and Gould's (1978) use of the Interview as a data collection method.

The current researcher had to decide on an appropriate method of collecting data for the current research study and the personal interview as an accepted method of researching in the social sciences had to be considered in this regard. Furthermore the personal interview was used by a number of influential researchers in the adult development psychology field (Erikson, 1950; 1959; Levinson et al., 1978; Gould, 1978). McCrae and Costa (2003) asserted that the interview as a method

of collecting data is sometimes nothing more than a questionnaire administered verbally in a one-on-one situation.

According to McCrae and Costa (2003) some of the limitations of the personal interview as a data collection method are as follows:

- the output of the interview depends on the judgment of the interviewer and even expert judgment is fallible;
- the interviewer who interprets the data must form an opinion about the person and his or her life on a limited amount of displayed behaviour;
- interviewer bias is present and distorts all information gathered; and
- the interviewer is not an uninvolved, dispassionate observer, but rather an active participant.

McCrae and Costa (2003) commented that researchers who prefer interviews are usually devotees of the subconscious. Furthermore McRae and Costa are sceptical of its value where they imply that the subconscious level of personality has little impact on human behaviour and in any case psychodynamic interpretations, for example, internal conflicts cannot be disproved. Individuals who do not express conflicts to an interviewer can always be judged to be repressing them. As a counter to this argument Vaillant (1993) asserted that some theorists have difficulty with psychodynamic concepts due to their inability or disinclination to contemplate clinical facts on which an idea is based. Moreover, Vaillant states that such theorists reject intuitive understanding by individuals as experiences with little value.

McCrae and Costa (2003) conclude their comments on questionnaires versus interviews as methods of collecting data, by stating that

questionnaire results are normalised and consistent and unconstrained by the content of the individual's life. Interview results on the other hand, are permeated by the details of an individual's life structure rather than the individual's personality for example, the politics at the office, the specific problems of raising a teenager or of living in a declining neighbourhood. Countless forces beyond one's control may determine one's life structure such as economic realities, accidents and illnesses as well as the help or interference of relatives. These are important rudiments in understanding the individual's milieu but they are a source of potential misunderstanding when one is trying to determine the individual's personality traits.

2.3.2.3 The midlife crisis

McCrae and Costa (2003) stated in regard to the so-called midlife crisis that there is an uncritical acceptance that at 40 years of age there will be an increase in marital discord, a higher incidence of suicide, change of jobs and mental health problems. However, Cooper (cited in McCrae & Costa, 2003) conducted research into the midlife crisis and found no evidence of this phenomenon. This research was replicated by McCrae and Costa (1978) who then also found no sign of it, as did Farrell and Rosenberg (1981) who also claimed to have found no sign of these features in the midlife stage.

McCrae and Costa (2003) thus conclude that personality does not change at midlife as noted in the findings of many researchers in the 1960s and 1970s.

2.3.2.4 Expansion of the five factor theory – The Five Factor Model

Surprisingly, however, McCrae and Costa (2003) made a fundamental change to their approach in the 1990s when they acknowledged that it was an oversimplification to state that personality is stable having due regard to how complex life had become. They acknowledged that there is both stability and change in the lives of individuals and a notional model, which included both aspects, needed to be put forward.

McCrae and Costa (2003) proposed that their Five Factor Model (FFM) could provide just that and in so doing, provided clarity, if not some convergence, with other personality theorists by stating that many aspects of the personality are not traits. Examples of these aspects were given namely attitudes, roles, beliefs, values and goals.

The word 'convergence' above is used by this current researcher since retrospective reading of the literature shows clearly that the differences between McCrae and Costa's (2003) views and that of others were largely of definition and semantics. McCrae and Costa acknowledged that they had used the word 'personality' differently from other researchers. "Something can change and stay the same only if it has two distinct parts" (McCrae & Costa, 2003, p. 186). Their model of personality with two distinct parts is explicated below

McCrae and Costa (2003) presented their model of a personality system with the three central components, namely basic tendencies, characteristic adaptations, and the self-concept. They noted that although the self-concept is also a characteristic adaptation it is of such importance that it needs to be separately classified. Basic tendencies are stable and include the five personality traits as well as cognitive abilities, artistic talent, sexual orientation, and the mental apparatus which enables erudition and awareness.

Characteristic adaptations were defined by Costa and McCrae (2003) as tangible acquired accumulated frameworks that develop in individuals as they influence and are influenced by the world they live in. They can and do change. They also include acquired skills, interests, attitudes, beliefs as well as inner features of roles and relationships. The changes in adaptations are caused by biological maturation, changes in the environment in which that individual actually lives, or by intentional actions. This is very similar to Havighurst's (1972) conception of personality characteristics.

Another component of McCrae and Costa's (2003) FFM is what they claim is a set of self-starting systems which control the way the various parts of the adaptations influence one another. The examples are perception, coping, role-playing, analysis, and goal setting.

McCrae and Costa (2003) claimed that the most controversial aspect of the FFM is that it is based on the premise that traits are endogenous basic tendencies. In contrast to most other personality theories, they claimed that the FFM does not take into account any influence by the external environment. In other words, nurture does not play a role in the development of personality traits, thus the traits are biologically based. Their logic is that if traits are moulded by the environment, then change to traits should be observable over time. However, they found very little change in traits over time (McCrae &Costa, 2003). A challenge is issued by them that those who think the environment shapes personality traits should prove it.

2.3.2.5 The influence of personality on life course

McCrae and Costa (2003) acknowledged that though there is little change in personality traits after age 30, there is a great deal of change in people's lives thereafter, such as a decrease in physical flexibility and strength, sensory alertness, and energy. There are definite changes in the external world of individuals which have an impact on their internal world namely, children grow up, parents grow old and pass away, and jobs as well as roles change.

McCrae and Costa (2003) asserted that it is not a contradiction to say that personality remains stable whereas behaviour changes (for example history, technology and values also all change). They acknowledged that characteristic adaptations form the largest and most complex component of the personality system and deal with some of these important adaptations as follows:

- **Attitudes and values.** New developments call for new opinions, for example, the new Green Movement which opposes environmental pollution of the environment. Values become less changeable with age but open-minded people will be open to change.
- **Social roles.** A social role is defined as what society expects of an individual occupying a given position in a group. Roles can also be scripts that tell people what to do in certain specific situations. Roles are useful as they bridge the gap between the individual and society.
- **Changes in interpersonal relationships.** Some aspects of interpersonal relationships are based on roles and when roles change so do the relationships. Other aspects of relationships are reflections of traits. For example, if you are a warm person it is likely that you will be warm towards employees, neighbours and relatives.

- **The self-concept.** Although McCrae and Costa (2003) see the self-concept as a characteristic adaptation they also see it as a special part through which individuals understand themselves and they accordingly deal with it separately. They acknowledge that roles and relationships do change and being an important part of self-identity the conclusion must be drawn that an individual's self-concept changes accordingly.

Furthermore, it is asserted that everyone takes up many roles and the ego keeps the direction of the person aligned (McCrae & Costa, 2013). Moreover, much of a person's identity is tied to the roles to which they are committed.

2.3.2.6 Studying life structure and life course

McCrae and Costa (2003) proposed that the conventional approach to studying the aging process in human beings needed to be reversed. Instead of investigating how aging affects personality we should rather be investigating how personality affects aging. McCrae and Costa further suggested that although sufficient research had been done regarding the effect of personality traits on individual behaviour further research was needed in regard to the influence of each of the five personality traits on peoples' careers, familial relationships, and adaptation to stress and disease.

2.3.2.7 Psychological adjustment across the life span

One of McCrae and Costa's (2003) most important research findings is that neuroticism is the aspect of personality that is most relevant to adjustment. It seems that an individual with a disposition to being neurotic is likely to show evidence of maladjustment at all ages.

Furthermore, such individuals would be more likely to use ineffective coping mechanisms when dealing with stress. Jung (1933) made a very similar assertion. This aspect will also be tested in this current research study.

2.3.2.8 Conclusion

McCrae and Costa (2003) admitted that the debate as to meaning of personality had focused on words rather than facts and a completely new direction for research on personality and aging can therefore be envisioned. Nevertheless, their personality theory is very important to the understanding of individual differences in the experience of midlife transition.

2.4 PSYCHODYNAMIC VIEWPOINTS ON MIDLIFE

2.4.1 Coping and defense mechanisms

Coping and defense mechanisms are significant factors in any study of adult life transitions including that at midlife (Erikson, 1950, 1959; Folkman & Lazarus 1980; Vaillant, 1977). The reasons for this are that all adult individuals are faced with challenges during their lives particularly during the midlife transition period. The anxiety arising from these challenges varies considerably, for example dealing with the death of a sibling would in the normal course of events be more difficult than dealing with a reprimand from one's employer. The apparent increased number of challenges during midlife (Folkman & Lazarus, 1980; McAdams 1993; Neugarten 1968c; Oles 1999) would seem to lead to a greater use of defense and coping mechanisms in this period. It is anticipated that defense mechanisms and ways of coping would accordingly need to be included in any comprehensive model of midlife transition and crisis.

Defense mechanisms are defined in the DSM V (p. 819) as mechanisms that "mediate the individual's reaction to emotional conflicts and external stressors". According to Vaillant (1977) defense mechanisms are invoked unconsciously whilst ways of coping are conscious acts. Haan (1963) distinguished between defense and coping mechanisms by examining their properties. The properties of defense mechanism according to Haan are as follows. They are:

- rigid, automatic and dependent on stimulus;
- from the past and drive that of the present;
- distortions of the present; and
- driven by the pleasure principle using unconscious elements;

Properties of coping mechanisms or behaviour on the other hand are as follows, they:

- allow choice and are flexible and have purpose;
- are towards the future and takes present needs into account;
- are oriented to the reality of the present situation;
- are driven by the reality principle using conscious and preconscious elements; and
- satisfy impulses in an open and ordered manner.

2.4.1.1 Anna Freud

Anna Freud (1946) further developed Sigmund Freud's (1894) conception of defense mechanisms and added a tenth defense mechanism which she regarded as a normal rather than a neurotic mechanism namely, sublimation. Freud (1946) stated that this mechanism would only become apparent later in the individual's process of development. This, according to Freud, is because

sublimation is only exercised to conform to social values which presuppose a knowledge and/or acceptance of such values.

Freud (1946, p. 152) foresaw a development stage in later adulthood which is referred to by her as the ‘climacteric’. The climacteric is defined (the online dictionary, n.d) as:

- A period of life characterised by physiological and psychic change that marks the end of the reproductive capacity of women and terminates with the completion of menopause;
- A corresponding period, sometimes occurring in men that may be marked by a reduction in sexual activity, although fertility is retained; and
- A critical period or year in a person's life when major changes in health or fortune are thought to take place.

Freud (1946) asserted that adolescence and midlife were both periods when the id was vigorous and the ego was diminished, implying that defense mechanisms would become prominent in midlife again, as happens during adolescence.

2.4.1.2 George Vaillant

Vaillant (1971; 1977) is an influential researcher and is cited by prominent authorities in the psychology of midlife domain (Lachman 2001; McAdams 1993; McCrae & Costa 2003). Vaillant researched defense mechanisms (or adaptations as he preferred to call them) as a significant construct in the life course of human beings particularly the relative success of occupational, marital and health adaptation. Vaillant investigated what the crucial points in the life course were when the use

of certain mechanisms of defense became prominent or were disregarded. He provides a hierarchical model with four levels of adaptation, namely:

Level 1. Primitive defenses which are common in childhood. These are denial, distortion and delusional projection.

Level 2. Immature defenses which commonly occur during adolescence, or during severe depressive events and with personality disorders such as acting out.

Level 3. They are fantasy, projection, hypochondriasis, passive aggression and Neurotic which are common in everyone. These are intellectualisation or rationalisation, repression, reaction formation, displacement and dissociation.

Level 4. Mature defenses which are common in healthy Adults, namely, sublimation, altruism, suppression, anticipation and humour.

Vaillant's (1971; 1977) research findings with regard to mechanisms of defense were as follows:

- The theoretical hierarchy of adaptive ego mechanisms was established.
- Most of the ego mechanisms of defense which are described in pathological abnormal populations are also observable in healthy adults.
- Certain individuals used a fixed defensive style which seemed to last for decades. On the other hand, others seemed to evolve and change their choice of defense where the chosen mechanisms became more mature and synchronised.
- Level 3 and 4 mechanisms were more prominent in middle and older adulthood.

Vaillant (1977) concluded that:

- Unexpected deaths of relatives do not change the life course. What is more important is the interaction between whatever adaptive mechanism is chosen by the individual and those with whom s/he interacts.
- Environmental stress is normal and to be expected with any enterprising life.
- The hierarchy of defenses can be used to predict adult mental health and determine the extent to which environmental stress will impact upon the individual.
- Adults do change and evolve over time. These changes are much more apparent when the subjects are studied longitudinally and prospectively and come from within.

Vaillant (1977; 2000) posits three classes of coping mechanism which are in use for the individual to achieve equilibrium, namely:

- Seeking help from appropriate others, that is **seeking social support.**
- Intentional and conscious **cognitive strategies** to make the best of a bad situation.
- Involuntary mechanisms that alter the interpretation of internal and external reality in order to lessen felt anxiety.

These coping mechanisms are remarkably similar to those found by Folkman and Lazarus (1980).

Although defense mechanisms are, for the sake of completeness included in the current researcher's Conceptual model of midlife

transition and crisis (figure 3.1), they are only usually observable during clinical interviews (Vaillant 1977) and therefore will not form part of the investigation in this current research study. Coping mechanisms are also included in the abovementioned conceptual model as it has been posited that these mechanisms could enable individuals to effectively deal with the anxiety created during the midlife transition period and are easier to measure (Folkman and Lazarus 1980; Oles, 1999)

2.4.1.4 Folkman and Lazarus

Folkman and Lazarus' (1980) research into coping with stress during midlife is a key construct in the study of the midlife transition period. This is so as certain inevitable stress-provoking life events such as the death or serious illness of a parent seem to occur more often during the middle adulthood stage of life for many people (Lachman, 2001). Folkman and Lazarus are said to have created the exemplar device for measuring the ways in which people cope with stressful encounters (Schwarzer & Schwarzer 1996).

Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, (1986) define stress as a difficult situation involving a relationship between the person and his or her environment. Folkman et al. (1986) conceptualised a stressful experience as an arrangement whereby the person and the environment are in a self-starting, complementary two-way relationship. They furthermore postulated that there are two processes involved, namely cognitive appraisal and coping and these processes are vital moderators of tense person-environment relationships and their instantaneous and long-term consequences.

When faced with a stressful situation the individual first appraises the situation cognitively by posing the question to him or herself: Will it

affect my wellbeing or that of a loved one and if so, how? Moreover, the cognitive appraisal is thought to occur at a primary and secondary level (Folkman et al., 1986). The primary appraisal involves the individual evaluating whether they have a stake in the situation, the question being: Is there harm or benefit to my (or a loved one's) health or self-esteem? The secondary appraisal involves the question: What can be done to overcome or prevent the harm? Coping therefore involves the person's cognitive and behavioural efforts to manage or tolerate the arrangement. Previous research (Aldwin, Folkman, Schaefer, Coyne, & Lazarus 1980; Lazarus & Folkman, 1985) led to the construction of the Ways of Coping Questionnaire (WCQ) primarily as a research instrument to study coping processes that were used when individuals were faced with stressful situations (Folkman & Lazarus, 1985). The above research projects utilised factor analysis and eight factors emerged from this research (Folkman & Lazarus, 1985). Carver, Scheier and Weintraub (1989) also researched coping and refer to the Ways of Coping questionnaire as having two distinct general types of coping embedded in it namely, problem-focused and emotional-focused coping strategies. According to Carver et al. 1989, research to date shows little evidence of a connection between ways of coping and physical health except to the extent that the overuse of tobacco, alcohol and drugs has an effect on health.

Further elaboration on ways of coping is found in Chapter 3 (see Section 3.3.4). The current researcher will use the Ways of Coping Questionnaire in this current research study.

2.5 POST MODERNIST DEVELOPMENT IN THE PSYCHOLOGY OF MIDLIFE

As stated above, Jung (1933) can be said to be the founder of modern theory on midlife transition. The ego development approach to midlife was taken further by Erikson, (1950, 1959); Neugarten, (1968c); Havighurst, (1972); Jaques (1965), Levinson et al. (1978), Gould (1978); and Vaillant (1977).

The survey or clinical participants for most of the above studies on adult (including midlife) transitions came from what is known as the Veteran or Silent generation who were adults during World War 2 and reached midlife in the 1960s. The Baby Boomer generation, who reached midlife in the 1980s was therefore not studied by these earlier theorists. The social environment for these two cohorts was very different and could impact on the transition experiences for these two cohorts.

The postmodern period in midlife development psychology is deemed to have commenced in the 1980s, which saw a move towards cognitive behaviourism and away from depth psychology (Vaillant, 1993). The work of the late modernists (Gould, 1978; Jaques, 1965; Levinson et al., 1978) was criticised by postmodernist psychologists as lacking in the psychometric properties of reliability and validity especially as far as the existence of midlife crisis is concerned. This phenomenon was, and still is thought to be exaggerated (Brim, 1992; McCrae & Costa, 1990; Wethington 2000). Furthermore, the Baby Boomer cohort had not been subjected to significant research study and was regarded as far more liberated than the Veteran or Silent generation. The studies done in the 1980s and 1990s would have been done on the Baby Boomer cohort and the results obtained from this group could well have been different to that of the Silent generation due to the significant societal changes to which the Baby boomers were exposed as teenagers and young adults.

The setting up of the MIDMAC in 1989 in the USA is referred to in Chapter 1 as an initiative significant to the development of midlife theory. It should be reiterated here that the multidisciplinary team of investigators researched the physical, psychological and social health of people specifically in midlife. The researchers

were from diverse fields such as anthropology, demography, epidemiology, health-care policy, medicine, psychology and sociology. Data gathered in the early 1980s and the 1990s was used for cross-sectional research purposes. Significant research articles into various aspects of midlife from the scholars involved have subsequently been published in edited collections of articles or series (Brim et al, 2004; Lachman, 2001; Lachman & James, 1997, Willis & Reid, 1999). The research that followed since the 1990s has opened the door wide in the field to a much better understanding of midlife.

2.5.1 Important domains of midlife theory from the MIDMAC research.

Lachman and James (1997) referred to paths of life as different methods of functioning in terms of the psychological aspects of the self, relationships with others, physical health and work life. These paths often cross in midlife, for example, physical changes may be accompanied by children leaving home, as well as changes at work such as promotions, or being retrenched, or dismissed, or reaching the ceiling at job level. The multiplicity of roles and responsibilities at midlife and the capacity or otherwise to handle them may lead to the experience of stress during midlife. At the same time, this is a period of peak performance and other self-directed actions aimed at personal development. The similarity is noted between these findings and those of Neugarten (1968c) who spoke of an executive process of personality in middle age as well as a wide array of cognitive abilities.

In the year 2000, 30 percent of the population in the United States were between the ages of 35 and 54 years, which has led to the search for methods of optimising life during this period (Lachman, 2001). Lachman quotes statistics in the US that reveal that for many individuals, health problems in middle age increase dramatically between the ages of 40 and 60 years.

Aldwin and Levinson (2001) postulated that midlife is a period during which there are serious trials and hurdles that need to be overcome, such as job losses, failure to achieve goals, health problems or the onset of chronic illness of self, spouse and/or parents, difficult adolescent children, infertility, divorces, widowhood and parental death. It is argued that all these events cause stress and the extent to which these challenges are effectively coped with will determine the physical health problems that occur. Brim (1992) suggested that midlife, therefore, seems to be a period of transition in goal orientation and levels of aspirations if obstacles arise. In summary, Lachman and James state that in pursuit of goals by individuals, multiple paths can be taken, revisited and revised in the various domains as well. The domains in this regard are as follows:

- gender issues
- the self or interiority including self-concept, identity in midlife
- stability and change in midlife
- adaptation and wellbeing
- generativity
- work issues
- social relationships including the family and community
- stress coping styles
- religious factors
- turning points and life events.

These domains will be discussed below or in the chapters that follow in order to determine their relevance in the midlife transition and possible midlife crisis.

2.5.1.1 Gender issues

A core research question that should be asked is whether there are any differences between males and females in the midlife transition or midlife crisis. Early research on these phenomena were confined mainly to men due to the sexism which was prevalent prior to the start of the women's liberation movement.

Neugarten (1968b) saw a difference between men and women's approach to middle age where women defined their age status in terms of the timing of events within the family cycle, for example, the launching of children. Men, on the other hand, perceived the onset of middle age outside the family context such as in the work setting. Whether this is still the case in 2015 is a moot question and differences between men and women will be investigated in this current research study.

Levinson (1996) claimed that his research revealed there is, a single human life course through which all lives advance. Helson (1997) found no differences between male and female blue-collar workers with regard to psychological experiences during midlife. She postulated however, that the two groups arrived at middle age with different resources and life circumstances. In several studies women showed increases in achievement motivation and independence, as children got older.

Helson and Wink (1992) found in their research turmoil in the early 40s and stability by age 52 when the women had decreased in negative emotionality and increased their decisiveness. Helson cited several researchers (Datan, 1986; Mitchell & Helson, 1990; Neugarten, Wood, Kraines & Loomis 1968; White & Edwards, 1990) who found that the experience of women at middle age does not seem to be more negatively related to physiology and social roles than that of men.

Huyck (1997) posited that the evidence from contemporary research shows that gender differences in midlife are due to stereotyping and gender discrimination. However, the gender schemas that emerge in midlife seem to be more complex than in earlier developmental stages. Gender schemas are furthermore thought to be learned early in life and sustained and supplemented by educational institutions and occupational settings.

Research by Best and Williams (1993) found that across 25 countries, men in midlife were described as concerned with dominance, autonomy, and aggression while women in midlife were described in such terms as deference, succour and affiliation. However, these stereotypes became less influential in regulating conduct in midlife. Guttmann's research (1987) showed midlife to be a period of transition and the reworking of the masculine style of youth. Huyck's (1997) research shows that in midlife more than 50 percent of both men and women described themselves as moving past gender benchmarks. For example, women describing themselves as not so feminine that they did not like to paint walls and do carpentry better than their husbands, and men saying they were not so masculine that they did not like to cook or grow flowers. This would seem to mean a quantum change in attitudes towards gender in the 1990s. Gender bimodality and androgyny in midlife is thus supported by the results of current research (Huyck, 1997).

Huyck's (1997) research into gender differences regarding parenting is also informative with regards to experiencing midlife crisis. Midlife fathers (of boys) were found to report a combination of gratification and resentment as they observed their sons match or exceed their own achievements at a similar age. Midlife fathers were found to recall their

own feelings towards their own fathers at that time. The midlife fathers also expressed the possibility of another chance at succeeding indirectly through their sons. It was found that midlife mothers experienced the same mixed feelings as men about their daughters who were more attractive than them and had opportunities as a result of the sacrifices made. Wethington (2000) found in her study that women were just as likely as men to claim the experience of a midlife crisis.

Harper (1990) stated that midlife involves role changes regarding children, parental roles (brought about by the death of a parent or spouse), marital status, shifts in employment and income. Midlife transition, therefore, often requires resolution of feelings that may arise from these changes.

Parker and Aldwin (1997) are of the opinion that during the last four decades of the 20th century there have been substantial social changes in the generational cohorts. The Silent Generation were middle aged during the period 1960- 1980, the Baby Boomers were in middle age during 1980 - 2000 whilst it is now Generation X who are middle aged. The effects on social norms, behaviour and roles of the two genders within these three generational groups has been substantial during this period. This has had a significant effect on Gender identity. For example it is completely acceptable today for married women to work and to occupy professional positions often at a higher level than their male partners.

Gender issues in the workplace are of prime importance in any review of gender issues at midlife. Barnett (1997) asserted that the significance of employment in the life of men and women has been modified over the years. For men, work is at the centre of their identity (Erikson, 1959; Levinson, 1978) but for women the roles of mother and wife are considered to be core roles (Barnett, 1997). At the same time, barriers

women previously experienced to entering professions have been officially removed, but as Barnett asserts, they do still operate when it comes to gender choice. Women occupy more than 50 percent of the workforce in South Africa, but do not occupy the same percentage of top or even senior positions in professions (Employment Equity report, 2007). An important aspect highlighted by Barnett (1997) is that women have taken on increased role responsibility to include work roles, and contrary to expectations, there is an increase in wellbeing with these additional roles. This compares to the findings of Wethington and Kessler (1989) according to which decreased commitment to work led to an increase in distress for women. Interestingly a study by Barnett, Sayer & Marshall (1994) found that issues that led to work-related stress for women and men were a deficiency in the work situation in the aspects of: control, flexibility, advancement opportunities and the presence of work of value in society

Vandewater and Stewart (1997) explored whether women who pursued high level careers had similar midlife personality characteristics to men such as highly assertive and independent qualities. An alternative investigation by Vandewater and Stewart was also launched as to whether women pursuing careers that involved a calling (such as nursing, teaching or volunteer work) had similar personality characteristics but were different to those women in high level careers. No differences were found between those in high level careers and those in careers with a calling insofar as wellbeing was concerned. Differences in personality characteristics such as dominance, tolerance and independence between the women in occupations involving a calling and those in high level jobs were, however, found.

Personality differences (if any) between men and women in midlife transition will be investigated in this current research study.

2.5.1.2 The self

Several aspects of the self that are of importance in midlife will be discussed below.

- **The midlife self**

  This is one aspect of the human life course where ideas were first postulated many years ago as noted in Chapter 1. Modern period theorists also posited changes to the self in midlife (Erikson, 1950; Gould, 1978; Havighurst, 1972; Jaques, 1965; Jung, 1933; Levinson et al., 1978; Neugarten, 1968c).

  In this regard Helson (1997) argued that middle age has a reputation for being both highly stimulating but with hazardous bends and turns. She also noted with approval the contributions of Jung (1933), Erikson (1959; 1959) and Neugarten (1968a; 1968c), particularly regarding the difficulties of the midlife phase. Furthermore, Helson (1997) is of the opinion that middle age has different meanings in different times and places for different people. According to Helson midlife is a period during which people are progressively more amenable to formerly concealed or withheld and disregarded aspects of their personalities. At the same time, individuals in midlife are also more likely to become in tune with spiritual matters. Personality seems to become reorganised in a less egocentric way.

  Lachman and Bertrand (2001) postulated that the features and occurrences of midlife are influenced by individual

differences in personality and the self. This is in line with Jung's (1993) and McCrae and Costa's (2003) argument that people with a neurotic personality type were more likely to have crises in midlife and even at other life stages. The self in midlife is postulated by Lachman and Bertrand (2001) as including constructs such as individual particularity, self-understanding, sense of control, and wellbeing.

The two approaches to the concept of midlife personality namely: the trait theorists (McCrae & Costa 2003) and the stage theorists (Erikson, 1950; Gould, 1978; Levinson et al., 1978) discussed earlier in this chapter occupy the two sides of the debate amongst theorists as to whether midlife personality changes or not. Roberts and Del Vecchio's (2000) meta-analysis of over 100 longitudinal studies found that midlife personality is not immune from change. Whilst personalities are consistent through to late middle age they remain disposed to the adversity of life's challenges and the social effects of life experiences.

Caspi, Bern and Elder (1989) adopted a contextual approach by postulating that there is a dynamic interaction between personality factors and environmental context. Contextual models are thus seen as offering a fuller and composite picture of personality development (Lachman & Bertrand, 2001). The conceptual model of midlife transition used in this current research study (see Chapter 3) uses environmental contextual factors explicitly.

Helson (1997) dealt with midlife crisis and midlife transition by asserting that the term crisis comes from Erikson (1950) and is not associated by him with a breakdown in the psyche requiring hospitalisation or therapy but rather describes elevated unease and a perceived necessity to choose between two aspects. Midlife transition is a term less likely to cause misunderstanding and the issues in this regard encompass discerning whether midlife transition involves a change in self-concern (ego development), an expansion of thinking and perceiving, and/or a diminution in aspirations for many people .

Stein and Stein (1987) postulated that midlife is a period where consciousness goes through a transformative change process. This change process according to Stein and Stein happens in three phases namely:

- un-bundling of rigid or bound thoughts emotions and ways of being
- transition to new thoughts emotions and ways of being; and
- bundling or binding the new way of being, thinking and emotions .

During the transition stage the unconscious is working hard through dream images. This process is similar to Lewin's (1951) organisational change theory where an organisation to be changed is first 'unfrozen', to enable readiness to change and then changes take place in the unfrozen state after which the changed organisation is then 'refrozen' in its new state.

A further issue with regards to the back and forth shift between conscious and unconscious during midlife according to Jung (1933) is that few individuals would be aware of these shifts.. Accordingly, there may well be significant changes that the individual is not aware of, but these changes may be the underlying cause of anxiety or even depression. This could also be the explanation for denial of midlife problems by some individuals in the focus group as noted in Chapter 1.

Helson (1997) made the important point that no notable theorists support the concept of a normative crisis in midlife in the form of a mental disruption. What does, however, change is those dimensions of personality affected by intricacy, complexity, fruitfulness and magnanimity and therefore difficulty often arises with these changes. Furthermore, the resources available to the individual as well as in specific social and cultural circumstances will all play a role in the traversing of the midlife transition period.

Helson (1997) found support for the notion of significant turning points for some women at midlife such as the need to realise restrained or latent talent at midlife but indicated that these had to be viewed in terms of the framework that impacted upon the make-up and duration of these encounters.

Klohnen, Vandewater and Young (1996) found from their research that the hardiness of the ego had a significant

impact on whether midlife is a time of decline for some or positive self-reliance and adaptation for others.

In conclusion, Helson (1997) posited that there is much evidence of change in self-description and personality from people aged between 30 and 60 and that critics of personality change in midlife use a constricted visualisation of personality.

- **Identity issues in midlife**

Whitbourne and Connolly (1999, p. 28) define identity as "the individual's self-appraisal of a variety of attributes along the dimensions of physical and cognitive abilities; personal traits and motives and the multiplicity of social roles including as worker, family and community citizen. Lachman and James (2001, p. 299) define it as "a sense of self-definition within personality over time and in different domains". Whitbourne and Connolly's (1999) theory takes into account the number of social roles which individuals may take up, such as, employee, family member and community citizen. They also averred that the identity of an individual must, of necessity, be adjustable and disposed to change. Whitbourne's process model postulates assimilation and accommodation as the processes by which individuals create their identity styles. Kolb, Osland and Rubin (1995) used this conception in their learning styles theory whereby it was theorised that both individuals and organisations follow a cyclical process of learning. Concrete experience of an event is followed by observations and reflections which lead to the

formation of abstract concepts and generalizations which, in turn, lead to hypotheses to be tested in future action which then leads back to concrete experience of the tested action. Whitbourne and Connolly (1999) suggest that when there is an imbalance between accommodating and assimilating styles it leads to different identity styles, which, in turn, lead to a neurotic approach. In midlife such individuals could have difficulty accepting age-related changes by means of denial and projection onto other individuals or other things.

- **Sense of control in midlife**

Some aspects of the concept of sense of control are self-efficacy and locus of control (Lachman & Bertrand, 2001). It was found that in midlife an increased sense of control was developed over work, finance, and marriage, whereas there was reduced sense of control over sex life, children, health, and memory. Heckhausen and Schulz (1995) postulate two forms of control used by individuals when faced with difficult challenges namely principal control which aims to change the environment or situation to deal with the constraints, for example, leaving a job which causes difficulty. The alternate approach is subordinate control where the individual would seek to change the self to adapt to the situation. Wrosch, Heckhausen and Lachman (2000) found that younger and middle age adults used principal control whilst older adults used subordinate control.

- **Wellbeing in midlife**

  A sense or state of wellbeing in midlife could be an indication that the midlife transition process has been successfully traversed. It would therefore be important to define what is meant by wellbeing in midlife**.** Brim (1992) defined wellness as consisting of psychological wellbeing, optimal physical health and a sense of communality. Ryff (1995) defined wellbeing as follows:

  - positive relationships with other individuals;
  - proficiency in dealing with one's environment;
  - acceptance of self;
  - purposefulness;
  - a sense of growth; and
  - self sufficiency

  It is suggested that a sense of wellbeing would be the end goal of the journey through the midlife transition and should be included in the conceptual model of midlife transition and crisis.

2.5.1.3 Stability and change in midlife

Lachman and James (1997) stated that it is only when individuals deliberate about the psychological and health-related aspects of their work and family situations at an inner level that the manifold directions to successful midlife will be known.

They also posited that midlife is not easy to define nor is it a clearly demarcated time period as many authors have tried to state. It is

distinguished more by key events occurring in midlife rather than a particular age period (Lachman & James, 1997). However, culture, cohort and context are of importance in studying midlife transition for example, where the life expectancy in a country is only, say, 40 years old then midlife would not be a recognisable phenomenon in such a country.

As has been mentioned earlier, Neugarten (1968b), Havighurst (1972), Levinson et al., (1978) and Gould (1978) have postulated that some important life events are more likely to take place in the midlife years such as death and/or severe health problems for parents of midlife individuals as well as mid-career re-evaluation by those in midlife. Another example of an event occurring at midlife could be the reaching of a form of staleness or stuckness (being a psychological impasse in life) (Butler, 2007; Erikson, 1950). It is clear that midlife is the age when signs of wear and tear become physically apparent. This is possibly the main cause of the focus being on age periods rather than life events or context in defining midlife and midlife transition.

Regarding the perception of the age when midlife occurs, Lachman and James (1997) stated that their evidence across all ages suggested that midlife is from 35 to 65 years. Neugarten (1968c) was of the view that it was of more value to define midlife in terms of roles rather than age per se. Thus life events or new roles such as becoming a grandparent would enable a better understanding of what midlife means. The caveat for the life event approach, however, is that the impact of the event may be different for different individuals depending on when it occurs in terms of the on-time or off-time concept (Neugarten & Hagestad, 1976). For example, the impact of becoming a parent at age 30 years would be much different to becoming a parent at age 50.

Lachman and James (1997) acknowledged that there is also a subjective aspect to midlife and that people often have a clear sense of when they approach middle age or indeed are middle aged. They posited that this could be due to normative longevity data: the age of death of family members, and whether the individual has taken on responsibility for others younger and/or older. They also claim that the MIDMAC research revealed that midlife is a time during which a person tended to look back and ahead, unlike younger people, who tend to look ahead and older people who tend to look back.

According to Lachman and James (1997), major problems with midlife research are that many prevalent ideas about midlife are heavily influenced by popular writers and the media. These ideas are, however, often non-empirical, based on small samples, use clinical observations and are either only cross-sectional or based on a single longitudinal cohort. The MIDMAC research project, therefore, used only longitudinal research data across generations, samples, designs, cohorts and time periods in the determination of their findings. The MIDMAC researchers were able to codify much of the qualitative data and the findings therefore indicate a complex picture of midlife. For instance, one finding was that while personality traits were stable in midlife as per Costa and McCrae (1980) there were indications of changes in interests and values in midlife which could cause stress and even distress for some individuals and which may lead to dysfunctional behaviour or burnout.

Lachman (cited in Helson, 1997), in a review of literature on stability and change in personality, found support for McCrae and Costa's (1990) theory that the Big Five personality traits are stable throughout life. However, it seems that intra psychic variables such as motives,

coping styles, defenses and self-concept were more subject to change in various life stages.

Footnote [It should be noted that some of these aspects such as coping styles and self-concept would be described by McCrae and Costa (2003) as characteristic adaptations, which they conceded, are subject to change.]

Franz's (1997) posited that in regard to stability and change for midlife adults two predictions could be made, namely, the likelihood of:

- a decrease in assertiveness and an increase in affiliation; and
- higher levels of complexity and maturity as well as lessened narcissistic tendencies and increased pragmatism.

2.5.1.4 Relationships and wellbeing in midlife

Antonucci and Akiyama (1997) posited that while there are multiple paths of successful midlife development, it is universal that interpersonal relations and involvement with family friends and co-workers is an important part of this development. Antonucci and Akiyama refer to Neugarten's theory of the social clock as still governing middle age except that today it determines what should have been achieved for ourselves and others−especially one's children. What has also changed since the period 1960 – 1980 and become normative are the primary roles as worker, spouse and parent for both men and women. These roles are considered to be major indicators of successful adult development with women now occupying all three roles as well.

Putney and Bengtson (2001) refer to four predicaments in midlife regarding families and relationships as being: roles in care-giving, dependence of adult children remaining in the home, conflict between generations in the family, and the maintenance of bonds within the

family. The issues arising in this regard in midlife are according to Putney and Bengston:

- The care for elderly parents and the coincidental launching of children into adult life, or care of adult children still in the home or returning to the parental home (after divorce). All of these aspects cause role conflict ;
- Grand-parenting can also be expected during midlife which increases the number of potential role-conflict situations. The question that needs to be addressed is: Do multiple roles create stressors? Putney and Bengtson postulated three possibilities here, namely role overload or the role itself, role enhancement where multiple roles are beneficial for care givers, and role context, where timing and resources available will determine whether multiple roles will be more or less stressful.

Authors and researchers in the field of family relationships and roles in the new millennium agree that these have changed considerably (Marks, Bumpass & Heyjung, 2004). As examples of these changes Marks et al. cite the increase in longevity and cohabitation of partners before marriage and divorce. Furthermore, the experience within various family roles such as the partner role, the parent role, and the adult child role seem to be a noteworthy dictate of wellbeing (Marks et al. 2004). Changes in the meaning and expectations of the roles are also determinants of wellbeing. Data from the MIDUS survey as researched by Marks et al. (2004) revealed the following:

- Marriage is occurring at an older age and is often preceded by cohabitation;
- Second marriages among midlife people have increased and 23 percent of midlife adults have had two or more marriages; and

- The number of generations within households has increased from two to three;

2.5.1.5 Adaptation and wellbeing in midlife

Key issues to be addressed in midlife research are how well or how badly do individuals adapt to the pressures of midlife and what are the determining factors in this regard. In particular, the question whether the phenomenon of a midlife crisis, experienced or not, seems to always lead to the adaptation by individuals to midlife stresses as a consequence of wrestling with these stressors. Heckhausen (2001) prefers to focus on the developmental challenges which need to be traversed for adjustment and hardiness in midlife. The realisation of limitations which occurs in midlife and how this is managed by the individual is a major challenge in itself. The period is also a time of both gains and losses as mentioned at the very beginning of this thesis (Baltes, 1999; Lachman, 2001). Heckhausen (2001) argued that in midlife the process of realising and managing limitations of midlife occurs simultaneously. Proficiency and sentiment stability continue through midlife but time perspective and physical functioning decline, according to Heckhausen. The latter occur irreversibly. Heckhausen suggests that future research should examine which structural, and personality facets are associated with adjustment versus maladjustment in midlife. These factors have been included in the conceptual model of midlife transition for this current research study.

Heckhausen (2001) posed two challenges that are unique to midlife, namely:

- The attainment of fulfilment in the family and at work. Midlife is the final opportunity to evaluate whether or not one has succeeded.

- The inducement for public conduct which moves from a comprehension inclination to a sentiment adjustment during midlife.

Other specific challenges during midlife mentioned by Heckhausen (2001) are as follows:

- **Multiple simultaneous challenges**. This refers to the multiple roles across generations at midlife particularly in view of the changes to the nuclear family in the current era. The key to overcoming this challenge is to find balance between the strains created and resources available to contend with the strains.
- **Dealing with the achievement, or not, of long term ambitions or goals within timeframes.** The key to overcoming this is dealing with the regret, inactivity and despair of non-achievement of goals. These feelings can however be utilised as motivators to make changes or redirect one's life. Furthermore, age-related deadlines are known to many people and the anxiety caused by the looming deadline dates is a feature of midlife.

The issue of time orientation is, according to Heckhausen (2001), a cover for having to emotionally balance the loss of control over the achievement, or not, of self-set goals. The older one gets, the less control there seems to be. Midlife tasks are therefore bound up with the creating or obtaining of external and internal resources to enable the individual to hold onto control of their emotions and their lives. These resources are as follows:

- **Resilience.** Resilience is defined as the preservation, restoration or rectification in intellectual and physiological operations as a result of a challenge (Ryff, Singer, Love & Essex 1998). Resilience can be achieved by adapting goals and by using protective factors; personality strengths, family and community resources. Three distinct stressors are mentioned by Heckhausen (2001, p. 357), namely "microstressors, mezzostressors and macrostressors" or as Siegler (1997, p. 244) puts it: "small medium and large stressors". Microstressors are those of everyday life such as finding parking near the supermarket. Mezzostressors are said to occur during expected life transitions and life events which are unexpected such as the sudden death of a relative. Macrostressors however are historical events at societal level for example war. The above stressors according to Heckhausen (2001, p. 387) will tax the resources and "protective factors" of the individual such as the temperament of the individual as well as the family, friends and community support that the individual may have to rely upon.

- **Resources.** Socioeconomic status at midlife can have a direct impact on an individual's ability to control stresses such as unemployment and lack of financial resources. Middle class individuals at midlife are more likely to have the resources of finance, education and skill than unskilled, poorly educated and remunerated individuals. The higher the status, the greater the ability to control the constraints of middle age (Heckhausen, 2001). Social mobility is a corollary of socioeconomic status and

individuals who have the education and skills for upward mobility were found to experience less crisis in midlife than unskilled labourers.

- According to Helson, Stewart and Ostrove (1995) women from three different cohorts (in midlife at 1950, early 1960 and late 1960) differed in their perception of their resources.
- The human need for involvement in social networks including family members, extended family, or friends is well accepted. Von Dras and Siegler's (1999) research into the characteristics of social support behaviour revealed that individuals who were highly extraverted sought and received more social support than others during midlife. In a longitudinal study by Westermeyer (1998) he concluded that the evolution of gregariousness, sociability, and impassioned attachment during adolescence and early adulthood has a far-reaching influence in midlife. The size and density of social networks during midlife is also important according to Heckhausen (2001) since the emotional needs of individuals change as they age.
- Ego resilience is postulated by Klohnen et al. (1996) as being the personality characteristic needed to cope successfully in midlife. Klohnen et al. define ego resilience as the resource that enables the individual to flexibly modify the inclination to behave in a certain way that may not be appropriate at a specific point in time.
- According to Bandura (1989) the mediating role of perceived personal control and self-efficacy between actual changes in resources and the behaviour of the individual has been demonstrated in numerous studies.

This should also be valid during midlife when the number of challenges faced by some individuals may well increase. Heckhausen (2001) refers to research revealing that individuals with high perceived self-efficacy are able to see more challenge than threat in difficult situations in midlife. The work domain plays a central role in midlife in terms of perceived personal control. The more successful the individual is at work, the more that individual seems to have control over time, resources and people in the workplace. It is also more likely that such an individual will perceive him- or herself to be in control of their life.

- Experience, knowledge and expectation of adult development often enable midlife adults to cope more efficaciously with challenges that may arise.
- Heckhausen and Schulz (1995) refer to primary and secondary control of the environment by individuals. They class primary control as the selective choice of achievable goals as well as the avoidance of unachievable ones and dealing with failure. They posit that secondary control refers to inner use by the individual of motivational and emotional resources.
- Heckhausen (2001) posed an interesting conundrum. The midlife crisis may be a convenient concept to arrange a social formula regarding midlife that permits social reduction and consequent self- improvement. Thus midlife individuals often tend to move into midlife expecting the worst but experiencing comparative surprise at the smooth ride.

2.5.1.6 Work issues in midlife

The impact of midlife transition difficulties on an individual's career development is of importance due to the impact of work-related issues in the lives of people. According to Campbell and Hefferman (1983), midlife crisis, insofar as it influences the working world of individuals, is, a review of values, attitudes, lifestyles and personal goals during midlife. This review led to changes in work or career behaviour being observed. Mid-career adjustment seems to be operationalised by job stability and job satisfaction in midlife. Leong and Boyle (1997) argue however that the constructs of job stability and job satisfaction are not consistent enough to be directly visible in career adjustment due, for example, to lack of job opportunities, over qualification or affirmative action. Furthermore there is a paucity of systematic studies of what is a complex issue (Leong & Boyle, 1997). Hurrel, McLanely and Murphy (1990) examined stresses at various age groups and found that underuse of abilities was more strongly related to job dissatisfaction amongst midlife employees than amongst older or younger employee groups. Leong and Boyle (1997) found that individual differences, such as intellectual capacity, played the most significant role in whether or not career adaptation problems would occur in midlife. Gender difference added further to the complexity of the issue as women's careers were often interrupted due to child bearing and parenting responsibility.

Holland's (1997) model of work environment and personality type fit was explored by Leong and Boyle (1997) who found that individual differences in personality traits and ethics appreciably influenced midlife career adaptation. Individuals with significant ability to control urges as well as financial and tasteful principles were more contented with their jobs in midlife. The construct of sociability was also important where those individuals who lacked sociability skills stayed

in their jobs for longer but were less satisfied - meaning that job stability is not necessarily an indicator of job satisfaction. Surprisingly, however, congruence between personality factors and work environment (Holland's conception) did not predict job stability or satisfaction at midlife (Leong & Boyle, 1997). Men displayed higher congruence than women. Further findings in this regard were as follows:

- Socially extraverted women were more satisfied with their jobs.
- Sociability, self-confidence and social extraversion were critical to satisfactory midlife career adjustment.
- Global job stability and job satisfaction do not apprehend the complexity of midlife career problems.
- Job security in working class positions is more important than in upwardly mobile positions.

Stern and Huyck (2001) argued that the selection of an occupation is an intricate interchange of ethics, interests, disposition and encounters, together with providence. Moreover, the significance of the work done by the individual is also salient and the drive to add value, receive remuneration, and to have social engagement are the main reasons why people work (Stern & Huyck, 2001). Meyer and Allan's (1984) concept of commitment is also important at midlife. According to Meyer and Allan commitment includes firstly, a commitment to continue in the organisation (in other words, perceived cost of leaving the organisation); and secondly, an emotional commitment, which manifests itself in the interest and loyalty shown to the organisation. Intrinsic rewards, such as the relationships at work and meaningful work, became more salient as the individual ages. Accordingly, one would expect these issues to have more relevance in midlife.

Modern career orientation is, according to Stern and Huyck (2001), predicated on self-supervision of one's career in unending changing circumstances, otherwise known as the "protean" career (Hall & Mirvis, as cited in Stern & Huyck, 2001, p. 456). A protean career involves the individual rather than the organisation which employs him or her (Stern & Huyck, 2001).

Like Rosenberg, Rosenberg and Farrell (1999), Stern and Huyck (2001) also distinguished between early and late midlife as different phases. In early midlife, according to the latter researchers, the issues are to do with an awareness of limited career progress together with work-life balance and also having to deal with adolescent children. Individuals may also need to consider furthering their education and training to possibly even change careers or, in the case of women, to re-enter the job market. In late midlife the issues are, according to Stern and Huyck (2001), more about how much vigour and intent there is to expend in the work situation, and when; as well as how much energy and ambition to invest in work, and whether and when to remove oneself from remunerated work. Biological changes also impact on work issues particularly in physically demanding occupations (Stern and Huyck, 2001).

A new midlife worker meta-model is postulated by Stern and Huyck (2001, p. 477) which they term the "selective, optimisation with compensation model" (SOC). They posited that the three elements of selection, compensation and optimisation produce a process which initiates and controls intention (Stern & Huyck, 2001). Selection is about choices made; compensation deals with what skills or capacities are lost and need to be compensated for; and optimisation deals with

creating opportunities using known skills or changing focus to these areas.

2.5.1.7 Stress coping styles

Aldwin and Levinson (2001) posited that the contradictory findings regarding the supposed midlife crisis must mean that the protagonists are either wrong or midlife individuals are masters at handling the stress that comes with the crisis. Alternatively, the increasing distinctions between people as they age begin to manifest themselves in midlife. It is acknowledged that midlife is a recognised time of serious challenges for many people but not a time of crisis for most. The issues arising in midlife are postulated by Aldwin and Levinson as job loss or non-achievement of goals, death and/or health issues with self, spouse or parents, and problems with adolescent children. Siegler (1997) asserted that fear of declining health is a core midlife-stress creating issue. Thomas (1997) considered stress to be a detectable issue instead of an outside event or multiplicity of events and which includes symptoms of a psychological nature. Siegler (1997) viewed stress coping mechanisms as the linkage between demands made by the environment and the individual's ability to meet those demands. This view is in line with the assertions of Clausen (1998) and Elder (1998). A cogent argument by Siegler (1997) is that age does not influence reactions to life events but rather the opposite, where events are associated with age and life stage. Domain- related stress is also important, for example, occupational stress and socioeconomic status stress where the issue of control over stressors plays an important role in the ability to control stress. Gender is also important as the lives of men and women differ and stress is differentiated between genders. Indices of health related to stress are depression and anxiety (Thomas, 1997). Thomas also referred to research findings indicating that the number of roles occupied in

particular by women is not a source of stress at all. In fact, the quality of experience in the social roles and dissatisfaction affect regarding roles seem to be a much bigger source of stress.

Almeida and Horn (2004, p. 425) explored what they termed, “day to day stressors" such as spousal conflict, work and home task overload or work overload which they found to be significant in midlife. It is, however, conceded by them that these stressors are less severe than key life events in midlife such as retrenchment or the serious illness or even death of a parent which are usually focus-inducing experiences. These authors used the MIDUS database in their research and the list of daily stressors was accessed from checklists used by other researchers (Bolger, DeLongis, Kessler, & Schilling 1989; Ekenrode & Bolger 1995). Almeida and Horn’s (2001) findings were that midlife adults experienced a significant increase in the proportion of stressors relating to financial risk and responsibilities for children, than did younger and older adults. An interesting conclusion in this regard is that midlife adults experience a greater incidence of daily stressors than older adults and different types of daily stressors to younger adults (Almeida & Horn, 2001). These different daily stressors were all linked to social roles taken up by the three age group cohorts. Aldwin and Levinson (2001) postulate that young adults usually gain roles and lose very few, if any, whilst midlife adults gain additional roles and lose few whilst older adults lose many midlife roles and sometimes gain fewer but perhaps more difficult roles such as a widow or widower.

- Younger adults essentially took up roles as marriage partners, parents and work roles.
- The roles of young adults continued into midlife but became more complex. Furthermore new roles were added for people in midlife namely parenting young adults who may have left the home, grand

parenting, caring for older parents who were likely to be experiencing some health issues, role of individuals without a parent/s (who may have died) and role of a pre-retiree.

- Older adults experience more environmental issues such as downscaling of homes and take up roles as retirees thus leaving the role as a worker. A further role could be as a role as a widow or widower in the event of spousal death. The midlife roles of parenting young adults and caring for older parents disappears for older individuals.

Stress and coping processes play an important role in midlife and a change in attitude towards these processes is necessary. Losses need to be faced and previous assumptions re-examined (Aldwin & Levinson, 2001). A change took place in the conception of midlife crisis by some antagonists such as Rosenberg et al. (1999). They now view midlife for Baby-Boomers as a time for review with a distinction between early and late midlife. They posit a shift in the life story of those individuals in later midlife (in their mid-50s) while early midlife (those individuals in their early forties) is characterised as describing any setback, however insignificant, as a crisis (Aldwin & Levinson, 2001). An important distinction is asserted that rather than debating the existence or not of a midlife crisis a better question would be: Who has a difficult midlife and why?

Aldwin and Levinson (2001) examined life events common to midlife and postulated the following:

- **Death of one or more parents**. Women who care for parents prior to the death of parents were found to experience a higher degree of grief. The death of a parent leads to the awareness that the individual is not immortal while the death of the second

parent means that the buffer of the parent generation disappears and this could lead to a change in identity – the individual is no longer a child of their parents but an orphan.

- **Spousal bereavement.** This is experienced more by women than men, according to Troll as well as Atchley and Lopata (cited in Aldwin & Levinson, 2001). Widowhood can sometimes be followed by a period of growth for women if the new state leads to independence from a previously subordinate position in a family.
- **Divorce.** Although a minority of divorces occur after the age of 40 years in the USA, divorce can be more difficult fo**r** people who experience this in later midlife (over 50 years) particularly if this leads to financial decline and employment cannot be found. This may lead to depression and resentments.
- **Coping at midlife.** This aspect is dealt with under ego mechanisms of defense and coping in Section 2.4.1.2 above as well as in Section 3.3.4. Vaillant (1977; 1993) in particular, theorised that young people would use immature ego defenses such as denial and projection while midlife people would use sublimation which is a more mature defense. Vaillant, Bond and Vaillant (1986) replicated this with working-class men, which seems to imply that there are no differences in use of ego defenses within different socio-economic classes. Coping mechanisms are, however, differentiated from defense mechanisms and Aldwin and Levinson (2001) posited that coping mechanisms should be conceptualised in terms of energy conservation. Young men have high energy and would use more active strategies utilising more energy but that they were not necessarily effective. Midlife individuals would use more passive strategies which were more realistic, and the shift in midlife was from coping to management strategies.

Relationship stress at midlife particularly affects health in women (Thomas (1997). Stress should, however, not always be seen as negative since positive spinoffs such as maturing effects also occur. Furthermore, changes to values and perspective often result from stressful incidents. Thomas (1997) researched stress and health and found that internal locus of control, hardy optimism and prestigious employment position were significant factors in the successful handling of stress amongst midlife people.

The construct of wisdom is also dealt with by Aldwin and Levinson (2001) where they argue that the outcomes of stress often leads to self-reflection which in turn often leads to an increase in wisdom.

The constructs of micro, mezzo and macro levels of stress (Chiriboga, 1997; Heckhausen 2001) as elaborated in section 2.5.1.5 above will be utilised in this current research project where 1st, 2nd and 3rd degree crises will be measured. Macro stressors have been found to be of greater concern to middle age individuals.

2.5.1.8 Religious factors

Ryff, Singer and Palmersheim (2004, p. 94) explored what they term "protective factors" in health and wellbeing such as the role of religion and spirituality as an associate of positive health. Religiosity is thought to symbolise hardiness or resilience in individuals and it sometimes overrides lack of educational advancement or other forms of social inequality. Numerous studies are referred to by Ryff et al. (2004) where religious involvement was positively correlated with positive health and psychological wellbeing. Ryff et al. analysed social support as well as religiosity in their survey when social relationships and engagement

with religion were assessed. Religious engagement in childhood and adulthood formed part of the study of Ryff et al. (2004) and will also form part of the conceptual model of midlife transition and crisis for the current research project. The findings of Ryff et al., were as follows:

- For men, positive social relationships were associated with positive wellbeing and self-appraisal of health. This finding was prevalent for men and women and across socioeconomic classes. Simultaneously those higher socioeconomic individuals that reported health issues also reported poor social support mechanisms
- For women in good self-reported health and wellbeing, however, there was no significant difference in the incidence of positive versus negative relationship experiences. In regard to religiosity, the benefit of religious engagement for women of good health and wellbeing was found across all socioeconomic classes.

The aspects of social connectedness and engagement with religious and spiritual activities as aspects involved in the midlife transition will also form part of the current research study.

2.5.2 Models of midlife crisis

Oles (1999) and Hermans and Oles (1999) researched midlife crisis in men aged 35 to 45 years in Poland. Oles (1999) constructed a midlife crisis questionnaire (MCQ) of 76 items and used this together with the Time Orientation Scale (Nosal, 1993), the Adjective Checklist, the Ways of Coping Questionnaire (Lazarus & Folkman, 1984) and the Values Crisis Questionnaire, (Oles, 1999). Oles by using principal component analysis extracted three general scales, namely:

- intensity of midlife crisis symptoms which targeted changes in the self-image;
- psychological maturity which parallels generativity; and
- acceptance of the temporality of time and death.

Oles (1999, p. 1063) found that the presence of a crisis of values, the use of emotion-focused coping, past rather than future orientation, and a lack of goals (which he terms 'telicity') were necessary conditions for a midlife crisis to occur. Good internal consistency was found for these three factors (0.93; 0.83 and 0.71 respectively). Oles' study, however, did not include younger or older men with whom to make comparisons, nor did it include women. Moreover, the study took place in a climate of political uncertainty in Poland. Nevertheless, some important findings did emerge which will stimulate research elsewhere including the current research. For example, Oles (1999) was able to operationalise definitions of midlife crisis and value crisis. Similar concepts have been incorporated in a conceptual model of midlife transition for the current research study. In fact, Oles' (1999) MCQ was obtained from him and used together with additional items from the pilot study for this current research project (see Chapter 3) and 30 of his questions were used in the initial transitions questionnaire for this current study.

Hermans and Oles (1999) investigated a different aspect of midlife crisis by comparing three groups of Polish men who had scored high, medium and low on the **Intensity of Midlife Crisis Scale**. They found that the high crisis group were lower in affect regarding self enhancement, lower in positive affect and higher in negative affect than the other two groups. Hermans and Oles (1999) also found that the high crisis group had more negative perceptions about the future than the other two groups, but present and past orientation showed no differences between the three groups.

Hermans and Hermans-Jansen (cited in Hermans & Oles, 1999) provide an interesting distinction between midlife crisis and midlife transition by stating the following: Whereas midlife transition can be conceptualised as a time of rearranging of individual understanding without any indications of discomfort, midlife crisis signifies a muddled formation of the individual's own essence after rigorous transformation of the self**.**

2.5.3 Cross-cultural and international research into midlife transition and crisis

Apart from Oles' (1999) findings in Poland, Mann (1980) cited evidence of midlife crisis in a wide variety of cultures such as in Brazil, Hong Kong, Japan and Lebanon. Takenori (1980) found evidence of the phenomenon in Japan. Schreiber (as cited by Takenori, 1980) found that the midlife transition period was between ages 40 and 50 years of age in Germany. Shek (1994) found evidence of midlife crisis in Hong Kong and later researched the phenomenon among Chinese men and women. Tikoo (1996) researched the concepts in India where life expectancy was 58 years old so midlife would be around the age of 30 years of age.

South African research into the area is, however, very limited. There is no major research study regarding midlife transition or midlife crises in progress in any of the research institutions such as the Council for Scientific and Industrial Research (CSIR) or universities in South Africa nor has such a study ever been performed. Some research has taken place at South African universities in regard to facets of the topic such as a doctoral thesis on unemployment at midlife (Ribton-Turner, 2008) and women's perceptions and experiences in middle age (Brenner, 2007; Hargrave, 2006). The latter two research projects were Master's degree dissertations.

2.5.4 Domains within midlife crisis

The word ‘domain’ is often found in the literature on adult development to describe a sphere of activity or interests invariably used as a means to distinguish aspects to be researched. Riley (1998) for instance describes wide-ranging **domains** in adult development such as physical growth, health, cognitive development, personality, social attitudes and beliefs, occupational careers, psychoses, criminal behaviour, education, occupation, and family formation. Domains of major interest in the field of midlife development are the workplace, the family and the self or inner world of the individual. These domains will be key domains researched in this current research study.

Giele and Elder (1998b) posited that life course studies should collect data on inter alia major domains of activity. Giele (1998) in this regard, referred to key role domains namely education, employment, marriage, and parenting. Soldz and Vaillant (1999) referred to functioning in a variety of domains including global adult adjustment, career functioning/success, creativity, social relations, mental health, substance abuse, childhood characteristics, familial history, psychopathology, maturity of defenses, and political attitudes.

Levinson et al. (1978) use the word ‘components’ to describe what others mean by the word domain. They noted that the important components in a man’s life are occupation, marriage/family, friendship and peer relationships, ethnicity, and religion and in some cases, leisure pursuits. The most important ones, according to them, are occupation and family as these are universal components of human life.

2.6 THE LIFE COURSE AND LIFE SPAN PERSPECTIVES

The terms ‘life course’ and ‘lifespan’ are often used interchangeably (Mayer, 2002). Although there are intersections in these concepts there are also fundamental differences. Mayer (2002) distinguishes between the sociology of the life course and lifespan psychology as**:** what sociologists signify as the progression of actions or circumstances in life fields such as education and work from birth to death. The life course focuses on the implanting of the lives of individuals inside collective frameworks mainly in social portrayals and locations. On the other hand, the term life span is usually found in the field of psychology, and deals with investigation of individual progress which are enduring adjustment processes of attainment, preservation, reformation and qualities within psychological frameworks and activities (Baltes, Staudinger & Ulman, 1999). Mayer (2002) describes the life course as being used by sociologists to study the interaction between the environment and the person, whereas lifespan psychology focuses on intra psychic phenomena. Both approaches seem to be relevant to this current research study and will be incorporated into a conceptual framework model of midlife transition in Chapter 3.

2.6.1 Life course

Elder (1994) refers to the life course as a progression of communally determined occasions and portrayals that the person establishes over a period. It is not the same as the conception of the life cycle in allowing for several differing occurrences and portrayals that do not advance in a particular order but that comprise the totality of the individual’s material exposure. Similar to Elder (1994), Marshall and McMillan (2010) suggest that the institutions of society provide the structural foundation for directing the lives of individuals and that society constructs positions to be occupied by individuals during the course of their lives. Mayer (2002), stresses that the life course is a sociological approach which emphasises the outcomes of the life course for

individuals as being influenced even determined by societal forces such as technological advances.

The life course idea according to Giele and Elder (1998b) has released researchers from single constituent interpretations and initiated an amalgamated prototype with many parameters. Furthermore, the life course perspective is seen as vigorous due to previous knowledge and understanding; prospective assumptions; and the assimilation of individual intentions with extraneous necessity. Similarly, Vaillant, (1977) Clausen (1993) and Bateson (1989) show the contentment that older individuals obtain when they are able to effectively and efficiently master intricate issues. According to Bateson (1989), if middle age is investigated from the life course viewpoint, important links between all life stages can be sought so that interceding programmes to minimise stress and ensuing complications can perhaps be proactively initiated. Aging is seen as a biological, social and psychological process.

Riley (1998) stresses, however, that in studying lives and structures the most exciting methods that need to be stimulated are those that take into account the **asynchrony** between lives and structures**.** Riley puts forward the enigma of timing, namely that during the aging process people progress along a distinct centre-line of the life course while simultaneously alterations in social frameworks such as the workplace, the family, knowledge and skill enhancement and other group structures move along their own centre-line of chronicled time. This asynchrony according to Bateson (1989) between individual and historical timelines results in an ongoing incompatibility or delay of one dynamic over the other. Where there is such asynchrony or incompatibility during midlife it is likely that high levels of stress will be experienced.

Giele (1998) argued that stage-based theories are deficient in being able to chart changes in women's lives. O' Rand (1998) asserted that the life cycle has been significantly modified and is strongly reductionist.

Giele and Elder (1998b) posit that role conflict and midlife stage theories were eclipsed by the life course and lifespan perspectives and also assert that the investigation of the life course has discernibly shifted from a readiness to split up the survey of growth into distinct phases to a fixed detection that any juncture in the lifespan must be seen effectively as the result of previous exposure and prospective suppositions as well as the assimilation of individual incentive with external restraint. Giele and Elder (1998b) summarised their view that an interlocking process exists whereby the person, body of people and way of life meet but with sequentially directed events through which all dimensions of the process are dynamically related.

Clausen (1998) described the life course from a psychological viewpoint as an evolutionary system in which the person progresses from dependent entity to an independent individual. Midlife is part of this life course process and the extent to which the individual has evolved will determine how the period will be experienced.

2.6.2 Lifespan

Staudinger and Bluck (2001) conceived midlife as no longer utilising chronological age as a salient marker whilst Lachman and James (1997) stated that the approaches to the study of midlife have been expanded towards a lifespan approach.. A lifespan perspective according to Staudinger and Bluck (2001) defines midlife as abstracted from chronological age and they pose an interesting question as to whether midlife is worth studying at all since midlife people are usually sufficiently socialised into roles and are healthy. However, development processes in midlife and the assistance

needed to successfully traverse such processes is replete with aspects to be explored and research is suggested in the domains and events central to midlife and will be a focus of this current research study. (Staudinger & Bluck, 2001). Mayer (2002) views lifespan psychology as focusing on the psychological development of the individual and not the societal or environmental influences that may affect that individual. Midlife is also defined by the cohort who is asked to define it and current population studies reveal an increase in life expectancy which, in turn, has led to a socially constructed concept of middle life (Staudinger & Bluck, 2001

An important aspect postulated by Staudinger and Bluck (2001) is the distinction between early and late midlife as noted by other researchers (Lachman, 2001; McCrae & Costa, 2003; Rosenberg, Rosenberg & Farrell 1999), earlier in this chapter, which has some obvious differences. In early midlife the individual is entering the period but is still relatively young, growth orientated and with nuclear family commitments, while at late midlife issues such as health, death and grandparenthood are of more importance to them.

Staudinger and Bluck (2001) put forward the following six proposals for the study of lifespan development:

- Development is the lifelong change in adaptive capacity influenced by biology and culture. No age period holds supremacy in this continuum. The implications for this proposition are that midlife study must take into account precursors and outcomes of midlife.
- Development implies gains and losses. Progressive aging leads to more losses. The implication is that at midlife losses and gains are equal.

- Biological influences become more detrimental with aging. The implication is that a distinction between early and late midlife is necessary.
- A reduction of resources is age related for example with increasing age, maintenance, recovery and regulation increases with age. The implication for midlife is that a major effort towards the management of resources is needed.
- Development demonstrates modifiability. The implication for midlife is that although change is possible the emphasis is on optimisation instead of repair.
- Biological and cultural influences are not normative. The implications for midlife are that midlife characteristics are cohort specific.

A further important point made by Staudinger and Bluck (2001) is that studying midlife must include older and younger people together with midlife individuals. This aspect will be incorporated into this current research study.

2. 7 CONCLUSIONS AND SUMMARY

It is clear from the available literature that the study of midlife is relatively new with major research taking place only in the last two decades. The insights of earlier theorists such as Jung (1933); Erikson, (1950) and Neugarten (1968) are still highly respected and are asserted to have strong face validity. The ideas and research of Gould, (1978), Jaques (1965) and Levinson et al., (1978) are well balanced by the thoughtful research of Tamir (1982) and McAdams (1993) as well as the empirical research and strong views of McRae and Costa (2003). A debt of gratitude is due to the MIDMAC researchers in the 1990s who have completed ground-breaking work about midlife which is of great assistance in drawing out the issues for research into midlife transition and midlife crisis.

The hypotheses in Chapter 1 cover many of the key issues which arise out of the relevant literature on the topic of midlife transition and midlife crisis.

The conceptual framework in Chapter 3 will contain some of the key constructs covered in the literature study.

CHAPTER 3

CONCEPTUAL FRAMEWORK

3.1 INTRODUCTION: LIMITATIONS AND ASSUMPTIONS

Riley (1998) argued that no single phase of a person's life can be understood without considering the antecedents and consequences of certain events. He asserted that this conception is fundamental to a proper understanding of the life course. The impact of antecedents relevant to midlife transition, and especially the so-called midlife crisis experienced by some individuals, together with how the individual reacts or copes with these events and the consequences thereof are demonstrated by the conceptual framework model of midlife transition and crisis in South Africa (see Figure 3.1 below). This model is aligned to the life course paradigm (Giele & Elder, 1998b; Riley, 1998) as well as aspects discussed in Chapter 1 together with further key issues that arose from the literature survey in Chapter 2. The relevant aspects will be dealt with in more detail in this chapter.

According to Colby (cited in Giele & Elder, 1998a) there has been a move away from the general stages of development theory in psychology since the late 1980s to a more circumstantial approach as to how people adapt that is more compatible with the essential tenet of the life course perspective.

The literature study, and particularly the more recent developments in the life course approach (Giele & Elder, 1998b), point towards a more appropriate amalgamation of many variables for research purposes. This is in line with recent thinking that the issues involved in transition to midlife are more complex than only a narrow focus on single factors for example, personality traits, generativity or the definition of midlife crisis (Helson, 1997; Lachman, 2001; McAdams, 1993). As many factors as possible have, therefore, been included in the proposed conceptual model of midlife transition and crisis. Data gathering for all the specific factors was, however, limited by time and complexity in that the ability to obtain sufficient meaningful quantitative and qualitative data was too complex and time-consuming.

These limitations were further compounded by the need to be parsimonious to avoid the focus becoming diffuse (Riley, 1998; Trafford & Leshem, 2008). Notwithstanding the limitations of the study mentioned above, it is submitted that there are sufficient research findings to make some valid assumptions which underpin this research study, namely that:

- The antecedent constructs of turning points, key life events, occupational difficulties and social role transitions do occur inevitably and more often in midlife, whether earlier or later than other stages, as part of the life course (Clausen, 1998; Erikson, 1950, 1959: Giele, 1998; Lachman, 2001; Laub & Sampson, 1998; McAdams, 1993; Wethington 2000). Such data was accordingly not captured from the participants. The constructs are, however, included in the proposed conceptual framework model of midlife transition and crisis and are elaborated upon below (see Figure 3.1).
- Similarly, the so-called social clock change is also assumed to take place and is included and explicated in the proposed conceptual model of midlife transition and crisis (Clausen, 1998; Helson et al. 1984; Neugarten, 1968c).
- An assumption is made that when any of these antecedent situations occur they will trigger off a reaction to be processed by an individual. The questions that arise in this regard and which will be explored by the current researcher are:

    - Will an adverse reaction occur in some cases or all cases and if so why and how intense will it be?
    - Which factors in the conceptual model of midlife transition and crisis, if any, will have an influence on the processing of a reaction experienced by the individual?

3.2 RESEARCH STRATEGY

The strategy for this current research study is to obtain as much specific data as possible (including some qualitative text) using an online survey. Data relating to the various aspects of the model will be captured having due regard to limiting how much time the

participants would have to take to complete the survey. A lengthy process could impact on their motivation to complete the survey. Interviews will not be conducted.

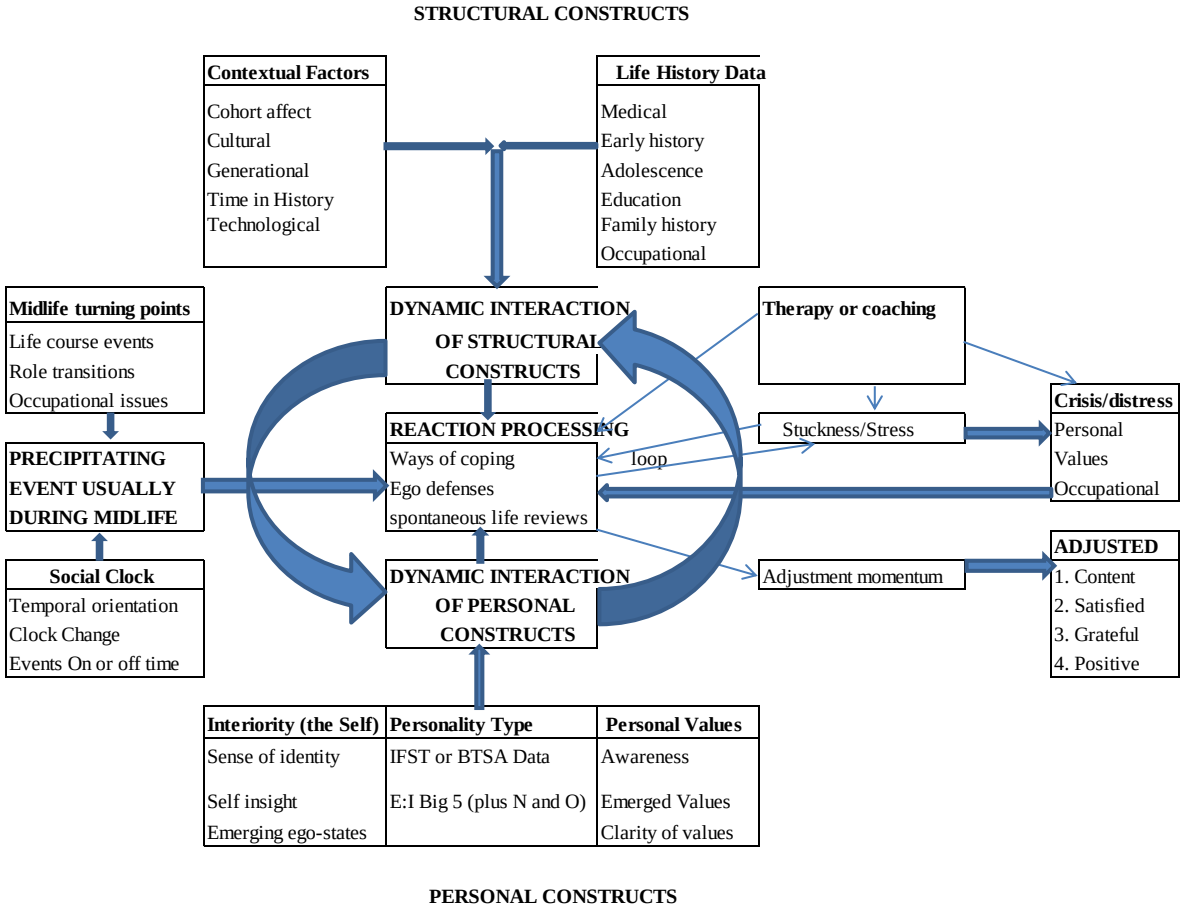

Figure 3.1: Conceptual framework model of midlife transition and crisis

3.3 ELEMENTS OF THE CONCEPTUAL FRAMEWORK MODEL

3.3.1 Precipitating events or triggers (antecedents)

The first concept to be examined in the proposed model is that of triggers or precipitating events usually occurring during midlife. As stated above in Section 3.1 it is a basic assumption of this research study that turning points, life events, work difficulties and social role transitions are inevitable for most individuals in midlife and could act as triggers. Although these aspects were not canvassed amongst the participants in the survey they are explicated below for the sake of completeness.

3.3.1.1 Turning points

A turning point is defined as a time or event where one took a "different direction from that in which one had been travelling" (Clausen, 1998, p. 202). Clausen (1998, p. 203) cites Hareven and Masoaka as defining turning points as "an alteration of the life path, a course correction" and suggested that a good question to ask a person in this regard is: "As you look [your life chart] over, can you pick out any point or points along your life course that you would call turning points – where your life really took a different direction?". The significance of similar types of turning point experiences to individuals is exceedingly divergent. Clausen (1998, p. 203) stated, that elaboration in this regard is needed as many individuals mistake the passage through various roles for turning points and clarified that some "role transitions are expected and involve reorientation of priorities and activities but not always a substantial change in direction". However, quite conceivably, certain role transitions do constitute turning points for some people for example, life after marriage is quite different if the couple had not lived together before their marriage.

A combination of quantitative and qualitative approaches in this regard is accordingly indicated. Laub and Sampson (1998) used both methodologies and used the person-based approach to uncover turning points. Abrupt change occurred in certain situations for example, losing a job, while incremental

change occurred over time in the context of an ongoing relationship such as a marriage.

Turning points are distinguished from life events in this conceptual model of midlife transition and crisis as life events are equitably explainable (Clausen, 1998). Two recent studies (Moen & Wethington, 1999; Wethington et al., 2004) on midlife crisis and self-perceived turning points were done where a distinction was drawn between the clinical and popular versions of a midlife crisis, on the one hand, and perceived turning points, on the other. Turning points were further explicated as an interval during which the individual underwent a "major transformation in the views about the self, commitments to important relationship or involvement in significant life roles" (Wethington et al., 2004, p. 590). The findings by Wethington et al. were, by their own admission, questionable and their strategy was changed for their second study when more in-depth information was obtained. The findings of the second study were that four important turning points in midlife have major significance, namely:

- work or career issues;
- receiving knowledge of self and other of a disturbing nature;
- receiving knowledge of self or other of a pleasurable nature; and
- the fulfilment of dreams.

These four variables accounted for around 80 percent of the variance. The interesting finding was that the work-related turning points for men peaked at early midlife (before age 40) and again in late midlife (after age 50). The majority of people reporting work-related turning points connected this to job or career change. The common thread for turning points applicable to receiving disturbing personal feedback was the test posed by the revelatory personality information (Wethington et al.,

2004). This finding is in line with Clausen's (1998, p. 192) point on "spontaneous life review" where, faced with a challenge to one's righteousness or sense of direction, individuals are forced to make "adjustments to the self-image".

A distinction should be made between major and minor turning points. Major turning points can often only be seen when the individual looks back at their lives later on and finds significant incremental changes such as those mentioned above. Examples thereof are physical incapacitation or job loss. A positive outcome of a turning point could, however, be circumstances that led to new opportunities. Moreover, turning points usually do lead to an alteration of the perception of the self (Clausen, 1998).

Clausen (1998, p. 204) identified the following aspects as determinants of the impact of major turning points:

- major role or roles affected (educational, occupational, marital, parental,
- relationship);
- activities, aspects of life most affected;
- source or cause of turning point;
- timing of the turning point; and
- ultimate consequences as seen by the individual.

3.3.1.2 Life events

All individuals will experience certain events during their life course such as the commencement of schooling, adolescence or adult life as well as the death of a family member, to mention just a few. Giele and Elder (1998a) conceptualised the life course as a progression of commonly determined experiences and social roles that are performed

by individuals over a period of time. This enables the study of events in any individual's life course to date, the context in which they took place (internally as well as externally), and the physical and psychological condition of the individual at the time and subsequent thereto. Scott and Aldwin (1998) argued that the lives of individuals are inimitably moulded by when, and in what order, life events occur. Teachman (1982) elaborated further that life history data can record the exact moment of transitions in and out of various stages, for instance, midlife.

Examples of life events are found in a number of meta domains such as education (year started preschool, primary school/s, high school/s, university and so on), family events (year of first marriage, years children born), work history, geographical relocation, major illnesses, and so on. According to Giele (1998, p. 248) these life events are the "basic building blocks for descriptive and explanatory analysis and they coincide with role domains".

It is important to note that the individual's elucidation of the actual experiences, which may have lasted for some time, is always going to be personal (Scott & Aldwin, 1998) and this means that the separation of events from the meaning thereof is not always distinct. The unfolding and combination of these events into the psyche of the individual affects the construction of the self.

Life course events that are more likely to occur during midlife than in young adulthood are parental death, spousal death or serious illness, biological changes, parenting adolescent children, reaching the summit of authority and influence at work (for professional middle class individuals), in the family and in the community as well as in creative output (McAdams, 1993).

3.3.1.3 Roles and role transitions

Roles are found in all social structures in society such as families, workplaces, friendships and the community. Over the life course, individuals enter certain roles, relinquish others, acquire certain motivations, skills and abilities but lose others (Riley, 1998). These roles are found in the nuclear and extended families as follows: in the nuclear family, the parents take up the role of a parent while in the extended family these parents are also the children of their own parents and they take up sibling roles as well. There are as many roles at the workplace, where the work position role occupied by the individual is defined by means of a job description. That person may also take up additional roles on committees and teams inside or outside the organisation or professional societies.

Role transitions refer to the movement from one role to the next such as when a person is promoted at work or transferred to another department with new colleagues, subordinates and bosses. When an individual changes jobs or careers this usually involves a role transition as the new position could involve different responsibilities. Riley (1998) postulated that role transitions experienced by individuals have an impact on others as well such as on the individual's children or spouse. From this it can be deducted as well that when such life history data is collected, detailed information on roles and role transitions is required.

Blatner (2000) differentiated between social roles and character roles. Examples of social roles are indicated to be that of a parent, spouse, customer, employee and child. These are roles recognised by society and those individuals taking up such roles are expected to function in a particular manner. On the other hand, character roles relate to a type of persona that the individual is expected to portray. Examples of character

roles are the joker, the worrier, the rule-keeper, the peacemaker and so on. McAdam (1993) described similar concepts as ‘imagos’ which he defined as the characters that dominate our life stories. These characters, according to McAdams (1993), are the separate selves embodied in the multiple roles that one assumes in daily life or what Watkins and Watkins (1996) defined as ego states.

Maccoby (2002) distinguished between social character and individual character. Social character refers to the active, highly energised and emotional attitudes shared by a particular group. Individual character, on the other hand, refers to the disposition of the individual. These two concepts are not mutually exclusive although social character is not strongly entrenched in individual character, it does, according to Maccoby, connect with individual character and thus enables the individual to understand the meaning of his or her behaviour within the norms of the specific culture. This interaction also allows the individual to vary his or her behaviour but remain within the cultural norms. Maccoby also referred to the need for there to be a fit between culture and character and if this is not so, a resistance to cultural change may ensue.

3.3.1.4 Occupational issues

It may be expected that since work-related turning points were the most significant aspects found by some researchers (Clausen, 1998; McAdams, 1993; Wethington, 2000) that work-related or midcareer crises in a pilot study undertaken by this current researcher would be a distinct variable that would emerge when the data from the pilot study was analysed. However, these aspects did not clearly emerge in the pilot study when principal component analysis of the responses to a 130 item questionnaire which included 60 items related to the work situation.

This could be due to the average age of the sample being 52 years of age, the size of the sample being too small (n = 68), or it may be that work-related crises are part of the larger concept of midlife transition and crisis. This will be investigated in this current research study.

Hutri (1996), however, postulated clearly that the occupational crisis can be differentiated from depression, anxiety and stress as it is based on work problems. Moreover, she postulated that occupational crisis is differentiated from stress or burnout. She acknowledged that her research had limitations in that her research sample was small and the questionnaire used was a five point scale relating to three constructs, which would mean that the application of her findings to the general population cannot be assumed or implied. Furthermore, she did not test for maladaptive personality traits or states. Hutri (1996) refers to an occupational crisis state as strong, work-related anxiety, the inability to solve work-related problems and a proneness to trying to deal with the crisis state by changing jobs or occupations.

To the extent that the findings of Wethington et al. (2004) as well as Clausen (1998) revealed that work-related turning points are the most significant issues in midlife transition (and furthermore almost all studies of midlife transition emphasise work as a major influential domain), some work-related issues such as job satisfaction, job stability, and personality at work are to be investigated in this research study.

Lowman (1993) postulated the view that workplace dysfunction is an underestimated problem with the implication that this could have a midlife impact. He classified workplace dysfunctions as the psychological circumstances which lead to an important handicap in the individual's ability to work. It is caused by either the disposition of an individual, or an interaction between that disposition and working

conditions. It can be independent or interactive with the nature of the individual's work or the organisational context. Unresolved workplace dysfunctions can precipitate a crisis for the individual and also have an impact on what the reaction will be to another trigger such as a turning point or life event.

3.3.1.5 The social clock (the timing of triggers or precipitating events)

Giele and Elder (1998b) noted that analysis of life event data have most use when the timing of the occurrence and the extent of the domain events (such as in the family or at work) have been codified. Lachman (2001) cited Helson and Neugarten as attributing an individual's personality development to the events or transitions in their lives. Helson et al. (1984) furthermore suggested that if events were to happen offtime they would become challenging and strained for the individual due to the expectations of the social system to be on time. Then, if they are not being met, they are incorporated into the psyche of that individual.

Neugarten, Moore and Lowe (1968) researched the issue of social time and classified the individual differences in the people they studied as being premature, on time or overdue in the timing of life events, which they described as being ontime or offtime. Their conclusion was that there was a diverse interconnectedness between age, period and cohort.

Neugarten (1968b, p. 97) postulated the concept of 'clock change' which indicates that individuals changed their conceptual view of time from 'time since birth' to 'time left to live'. It is this transition in time orientation that she theorised caused developmental problems of a psychological nature for individuals. Oles (1998) found the same construct in his research in Poland.

3.3.2 Structural constructs

Structural (social contextual) constructs that could influence how the individual reacts to triggers, such as turning points or the occurrence if a life event, are included in the proposed conceptual model of midlife transition and crisis on the basis that an individual constantly and dynamically interacts with his or her social environment (Giele & Elder 1998b; Riley, 1998).

The life course mode of enquiry into adult development according to Giele (1998) envisages a four part model which must include:

- The place that an individual finds him - or herself in time, social structure and culture.
- The social circles within which the individual interacts.
- The active aspiration to achieve personal goals.
- The timing of sequentially ordered events in the individual's life.

The above aspects will be discussed in the sections to follow

3.3.2.1 Contextual factors

Adjustments or adaptations made by individuals and in the social environment are not mutually exclusive - the interaction between these aspects is two-directional in that the person influences the social environment and the social environment influences the person. Individuals, in fact often adapt to the social obstacles that they have to contend with by scheduling or rescheduling their life events to times which are more suitable, for example, a wedding date or when to have children. Riley (1998) posits a similar process where the changes in the lives of individuals are in perpetual interaction with the changes in the fabric of a country's population or culture. What needs to be determined

is therefore which relevant societal and social structures may have an effect on how an individual will cope with a triggering event. The aspects below are suggested.

3.3.2.2 The cohort effect

Longitudinal studies on the effects of cohort found an association between individual aging and historical period (Giele & Elder, 1998b). The contour of an individual's life course varied according to the year of birth. Riley (1998) postulated that members of different cohorts age in diverse ways because of cultural changes and not the other way around.

This current research project will be done on Generation X (those individuals born from 1965 to 1979 who are currently approaching or are at middle age) but some Baby-Boomers in their late 50s will also be included.

3.3.2.3 Cultural effect

The cultural background or affiliation of the individual has a significant impact on the attitude of the person towards aging as well as the roles expected of him/her. According to Esqueda (2011), Gervais (2011) and Martinson (2001), in many cultures, more respect is accorded to elders than others. The family structure within the culture, whether it be a nuclear family or an extended family will also influence roles within the family (Cliquet 2003). Culture can also be linked to religion for example Italian culture and Catholicism, Israeli or Jewish culture and Judaism or Arab culture and Islam.

3.3.2.4 Time in history

Global conditions which had an effect on generations or cohorts, for instance, the Vietnam War and so-called Cold War had an impact on Baby-Boomers but would not have any significant effect on Generation X. The current phenomenon of globalisation is, however, a unique experience for the current midlife cohort namely, Generation X and the ready and rapid availability of information and technology will significantly influence how they view midlife for example the internet provides immediate information and solutions to many problems are readily available.

3.3.2.5 Technological advances

The continuous exponential expansion and development of communication and computer technology is a unique aspect for the current midlife cohort. For example, the role of social media, smartphones and high speed internet has had the paradoxical effect of both simplifying and complicating lives at the same time.

3.3.2.6 Life history data

Life history data involves biographical information about all aspects of the individual's life course from birth to present. Examples of this are:

- medical and biological data
- early history(first 6 years and childhood)
- adolescence
- youthful adulthood
- religiosity
- midlife

- family data
- community data
- educational data
- occupational data.

3.3.3 Personal constructs

3.3.3.1 Interiority (The self)

In the later years of life people have a tendency to look within themselves, which is referred to as "interiority" namely a "movement of energy away from the outer world to the inner world orientation" or disengagement (Neugarten 1968c, p. 140). Furthermore, recognition or the coming into awareness of one's own mortality and the limited time left to live can be triggered by an event such as the serious illness or death of a parent or spouse. Clausen (1998, p. 195) postulated that awareness of mortality usually happens with "brushes with death, serious illness or death of a loved one". It is proposed that the feeling of being at a dead end in a role or relationship happens more often in middle age than in early adulthood. The awareness of our mortality is often triggered by high school reunions (Clausen, 1998) since at the 25th reunion of one's matric class one is forty three years old and in the midlife transition period.

3.3.3.2 Personality

Lachman and Bertrand (2001) argued that, regardless of the changes in the personality and the self of the individual as s/he develops during midlife, the type and manner of midlife occurrences for the individual is influenced more by personal differences in personality and the self than

between individuals. Some people with certain personality characteristics will experience certain events differently to other people with significantly different personality characteristics. Lachman and Bertrand (2001, p. 292) cite Caspi and others as using personality factors as an "antecedent for later life outcomes".

The findings of many studies done by for example Cooper (1977) Costa and McCrae (1988a) have shown consistently that there are comprehensive dispositions of behaviour which are used by most people (McCrae & Costa, 2003). Five broad personality traits have been established through empirical research namely, extraversion, neuroticism, openness to experience, conscientiousness, and agreeableness. As stated earlier in Chapters 1 and 2, individuals with a high score on neuroticism seem more likely to have experienced a midlife crisis (Jung, 1933; McCrae & Costa, 2003). Three of the big five factors namely, extraversion, neuroticism, and openness to experience were found to have salience to midlife difficulties (McCrae & Costa 2003).

Value conflict, whereby the individual believes that s/he has to compromise their values, has been included in the proposed conceptual model of midlife transition and crisis to investigate whether this is a problem and if so, if it is unique to midlife.

3.3.4 Reaction processing (ways of coping with stress)

A key question to be investigated by the current researcher for this research study is: How do individuals cope with stressful situations, and is this way of coping more or less prevalent in midlife?

One of the most often used measures of coping with stressful situations in research studies is the Ways of Coping Questionnaire (WCQ) of Folkman and

Lazarus (1985). They found eight primary factors or ways that people use to cope with difficult situations, which they describe as follows:

- **Confrontive coping**: determined efforts to alter the situation.
- **Distancing:** cognitive efforts to detach oneself from the situation.
- **Self-controlling**: regulation of one's feelings and actions.
- **Seeking social support**: seek information and/or emotional support.
- **Accepting responsibility**: acknowledgement of own role in problem.
- **Escape-avoidance**: wishful thinking and escape behaviour.
- **Planful problem solving**: problem-focused efforts to alter the situation.
- **Positive reappraisal**: creating positive meaning of personal growth.

Ego defenses are distinguished from ways of coping in that ego defenses are unconscious methods of coping or resolving conflict whereas, according to Folkman and Lazarus (1984), coping has a conscious cognitive element to it.

3.4 STATES WITHIN THE PROPOSED LIFE COURSE MODEL OF MIDLIFE TRANSITION AND CRISIS

3.4.1 Crisis

James and Gilliland (2001) described three different ways in which individuals react to crisis. Individuals may fruitfully manage the situation on their own and grow mentally stronger from the experience. Alternatively, they endure the crisis but deter it from consciousness (or dissociate from it) thus creating additional problems that could disturb them until the underlying issue is confronted. A final possible reaction or outcome is complete breakdown needing direct and concentrated support and relief.

This above conception has been elaborated upon by the current researcher and three levels of intensity of crisis experience are examined as part of this

proposed model of midlife transition. The analogy of burns has been appropriated in this regard, namely first, second or third degree crisis.

The hypothesis is that first degree midlife crisis describes some discomfort, which is probably common to all people. This level of discomfort can usually be resolved without direct assistance via a counsellor or life coach. The word ‘crisis’ at the first degree level, while not fulfilling the scientific definition of crisis, is used purely for convenience. It should be noted, however, that the ability to cope with situations varies among people and consequently any of the three reactions to a crisis mentioned above may occur to different people experiencing the same events. However, under normal circumstances it could be expected that first degree crises will be worked through by a majority of people. Such individuals will do so by making adjustments and adapting to the required changes. The process may even be positive when seen in retrospect for example if a new direction was taken as a result of the crisis and this had unanticipated benefits for the individual.

Second degree midlife crisis would be characterised by some emotional distress. The major symptoms of this level of crisis are the presence of some anxiety, subjective discomfort and/or immobility or stuckness (Butler, 2007). Coaching or brief counselling of such individuals is proposed as the treatment of choice or a starting point for dealing with this crisis level to enable the individual to adapt or adjust. Care should be taken to avoid a hasty patch-up job as this could eventually lead to a heightening of the crisis.

Third degree midlife crisis is when the situation becomes dysfunctional for the person and has consequences such as emotional disintegration or breakdown where hospitalization may even be necessary.

Explicating and elaborating on the scientific crisis-handling strategy (James & Gilliland, 2001) the life course model used in this current research study

proposes a feedback loop where the situation or crisis (including first degree crisis of a minor nature) is subject to regulation by coping mechanisms and the use of ego defenses. One of three possible consequences could flow from this.

The first possibility is that the stress state is alleviated and movement out of the state is obtained where adjustment or adaptation starts occurring. This adjustment or adaptation can be positive or negative. Positive adjustment or adaptation would manifest in the exhibition of positive states or behaviour by the individual (signs of an adjusted or life satisfied state). Negative adaptation would result in apparent adjustment but the appearance of symptoms or undifferentiated ego states which could lead to second or even third degree crisis states.

A second possibility is that the stress is magnified to second degree stress where some emotional distress is evident and counselling or coaching is definitely necessary to get movement towards positive adjustment and/or adaptation.

The third possibility is that if the individual does not obtain movement the risk is that the crisis state will become third degree crisis, possibly even chronic crisis with accompanying dysfunction and risk to the mental and physical health of the individual.

The proposed feedback loop concept posits that each attempt to cope with the situation provides feedback to the conscious or unconscious reaction processing of the individual, which, in turn, feeds back to the state of crisis of the individual and either increases it, decreases it or has no effect on it. The individual then tries harder, tries something else or does nothing. This action then achieves a result positive or negative which, in turn, feeds back.

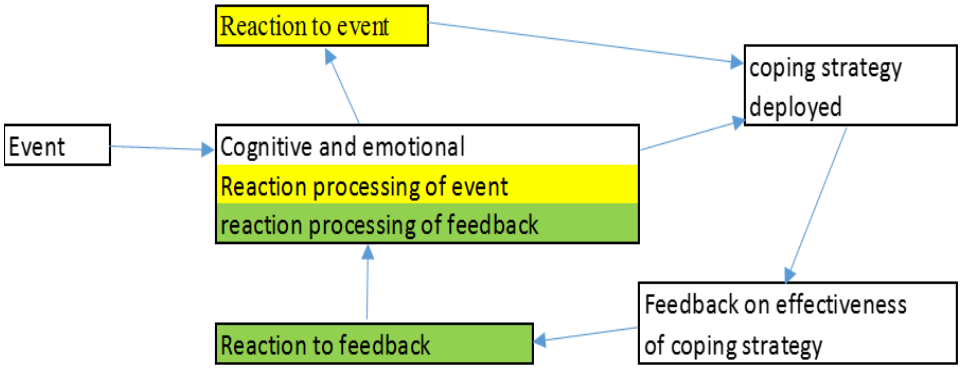

Figure 3.2 Reaction processing and feedbackmodel

3.4.2 Stuckness (immobility) or Stagnation

Butler (2007) described stuckness as a standstill state where an experienced crisis stimulates the return of past issues. This activates ego defenses or coping mechanisms, which the individual hopes will enable him or her to deal with the confusion caused by the crisis. A common such defense is rationalization. This process, in turn, confirms the person's belief that the current coping mechanism is adequate but, in reality the intrinsic issues remain unresolved and so the cycle continues until the individual realises that this way of coping is not working. Butler, however, saw crises as an unfolding and essential prerequisite in all lives across the life course. He argued that people often see impasse as failure and internalise the event as an indicator of inadequacy. This state is conceptualised as second degree crisis in this proposed conceptual model of midlife transition and crisis.

3.4.3 Adjustment momentum

Any reduction of felt discomfort levels due to positive action taken by the individual or reduction of symptoms would be taken to be a sign that adjustment or positive adaption to a crisis is taking place. The appearance of

adjustment or life-satisfaction factors as posited below (see Section 3.4.4.) would also be a sign of an adjustment momentum.

3.4.4 Adjustment or life satisfaction

Clausen (1998, p. 207) postulated that the roots of life satisfaction or dissatisfaction are salient aspects to examine, particularly how individuals contend with the latter. Exploration of the state of satisfaction, or not, is needed in the various domains and roles such as at work or career, in the family and within the self. These are what Clausen describes as "the stuff of which identity is shaped". If the states below are visible this is taken as a sign that positive adjustment or adaptation to the midlife transition has taken place. Clausen (1998, p. 201), in this regard, posited the following as indicators of a positive adjustment or satisfaction with life:

- zest as opposed to indifference or ambivalence
- resilience and fortitude
- congruence between desired and achieved goals
- positive self-concept
- positive mood tone, that includes:
  (i) taking pleasure from daily activities that constitute everyday life;
  (ii) regarding life as meaningful and accepting resolutely that life has been
  (iii) worthwhile;
  (iv) feeling that major goals have been achieved to date;
  (v) holding a positive self-image; and
  (vi) maintaining a happy and optimistic attitude and mood.

Observation of Erikson's (1950) midlife challenge of generativity as opposed to apathy is also part of the positive adjustment state.

3.5 CONCLUSION

The proposed conceptual framework model for midlife transition and crisis to be used for this research project includes many aspects from the life course approach where the dynamic relationship and interlinking between the person and the environment are included and measured. The personal constructs include many of the aspects found through research into midlife such as interiority, (Clausen, 1998; Neugarten, 1968c) and personality traits (McRae & Costa 2003). The ways of coping theory of Folkman and Lazarus (1986) will be used as an additional moderator of crisis states.

Chapter 4 deals with how the research project will be designed and what methodology and methods will be used to capture and analyse the data.

CHAPTER 4

RESEARCH DESIGN, METHODOLOGY AND METHODS

4.1 INTRODUCTION

Chow (2002, p. 2) defined research in psychology as the "systematic collection of data to answer a well-defined research question" and elaborated on this definition by positing that research is systematic if it follows a prearranged plan and the research question is well defined if it is an unequivocal conceptual assertion.

In this chapter the concepts of research design, research methodology and research methods are defined, located and distinguished contextually, having due regard to the literature survey in Chapter 2 of this thesis, the research questions and objectives from Chapter 1, and the conceptual framework in Chapter 3.

According to Lachman (2001) a shift from mere speculation to scientific study in the field of middle age only occurred from the early 1990s. The migration was from a dependence on one-on-one interviews only to the use of representative samples and scientific measurement in research endeavours. As indicated in Chapter 1, internationally researchers on midlife come from diverse fields such as psychology, sociology, anthropology, economics and medical science. Furthermore, it is postulated that there is an interaction and sometimes even a conflation between these academic fields (Brannen, 2008 Lachman, 2001). The sub-field within psychology which focuses on the life course and development is social psychology (Giele & Elder, 1998b). Therefore, sociometric aspects within the biographical data are also included together with psychometrics (for example, the three temperament factors) when designing the research programme for this current research study.

4.2 PHILOSOPHICAL RESEARCH PARADIGMS AND ASSUMPTIONS.

Huff (cited by Creswell, 2003) stressed the importance of the philosophical paradigm in research as it outlines how the research problem and research questions are conceived as well as how the information required to answer these questions will be sought.

According to Terre Blanche, Durrheim and Painter (2006) a research process has three major dimensions namely:

- **Ontology:** refers to the form and nature of reality;
- **Epistemology:** entails the nature of human knowledge and understanding that can be acquired through different types of enquiry as well as alternative methods of investigation; and
- **Methodology:** how the researcher goes about finding out what can be known.

A research paradigm is a system of interconnected methods and reasoning that describes the features of the nature of the study along the above three dimensions (Terre Blanche et al. 2006). Kuhn (cited in Thomas, 2010) posited that a research paradigm in its philosophical sense refers to a research tradition with a collection of views, ethics and hypotheses that a group of like-minded researchers follow with reference to what research is and how it should be carried out. The single investigator conducts the study having due regard to specific suppositions, worldviews and standpoints (Creswell, 2003). These beliefs are the guide for the action that takes place in the research (Guba, cited in Creswell, 2003).

Terre Blanche et al. (2006) classified research paradigms into three categories, namely:

- **Positivism.** This philosophical position has it that reality is objectively given and measurable and therefore objective and quantifiable. Commonly,

proponents of this approach would state that there is only one reality. Replicative research falls squarely into this paradigm. Part of this current research study seeks to replicate in South Africa research findings established in the USA and Poland and so this research paradigm needs to be part of the current research study (McAdams, 1993: Oles 1999).

- **Interpretism.** This research approach defines reality as the individual's subjective experiences of the external world. Commonly this paradigm would accept multiple realities and is associated with qualitative methodology which facilitates the intense, unobstructed and comprehensive study of particular features (Terre Blanche et al. 2006).
- **Constructivism.** This research approach deals with how the world operates so that the facts, as observed, are constructed. Social construction of phenomena is included in this paradigm. It has been argued earlier in Chapter 1 and 2 of this thesis that the experience of midlife crisis is a socially constructed ph**e**nomenon, and, on this basis this paradigmatic approach is also relevant to this current research study.

Terre Blanche et al. (2006) used the metaphor of artistic styles to explicate their view as explained above - positivism is likened to the school of realism in art, interpretism to impressionist art, and constructivism to cubism.

Terre Blanche et al. (2006) make the important point that the above paradigms exist synchronically, and it is quite conceivable for research to be conducted in the same project by the same researcher according to more than one paradigm. Furthermore, Terre Blanche et al. (2006, p. 40) argued that no paradigm is "incontrovertibly right" and deciding which paradigm/s fit/s the research question is more important. Research needs to meet validity requirements as well as research coherence. Terre Blanche et al. asserted that there are four decisions which, if properly made, will lead to the achievement of research coherence namely the:

(i) purpose of the research;

(ii) theoretical paradigm informing the research;
(iii) context within which the research is conducted; and
(iv) research techniques used to collect and analyse the data.

Cresswell (2003, p. 20) added two additional philosophical assumptions to ontology, epistemology and methodology, namely:

Internal and external validity – axiology. The researcher admits and acknowledges "the value laden nature of the study and reports his or her values and biases".

Rhetoric. The use of literary narrative and specific terms such as credibility, transferability, dependability, confirmability, understanding, discovering and meaning (rather than generalisability and objectivity).

4.3 CONCRETE OR SUBSTANTIVE RESEARCH DESIGN

Concrete or substantive research design describes how one conducts the research or how **one answers the research questions** (Coolican, 2004; Creswell, 2003; Trafford & Leshem, 2008). To elaborate the concept further research design demonstrates how an approach was formulated in order to deal with the enquiry that is put forward in the particular thesis (Trafford & Leshem, 2008). Moreover, in this current research study it provides the link between, on the one hand, the research questions as discussed in Chapter 1, and the relevant psychological theory derived from the literature survey as discussed in Chapter 2 (both of which in turn inform the conceptual framework model of midlife transition as discussed in Chapter 3) and, on the other hand, the data collection and analysis process. According to the Yin (2011, p. 75) the function of a research design is the 'logic' of the enquiry as opposed to the 'logistics' of the research study. Furthermore it ensures that the verified data acquired permits the worthwhile answering of the research questions as conclusively as possible (Kirshenblatt-Gimblett, 2006). According to Kirshenblatt-Gimblett, (2006), a sound research design takes the following steps:

(i) establishes the research problem coherently and validates the choice thereof;
(ii) reviews reported literature in regard to the problem field;
(iii) comprehensively and unequivocally stipulates the research questions that are linked to the research problem;
(iv) successfully depicts the material needed for satisfactory answers to the research questions and clarifies how the material will be acquired; and
(v) specifies the means of analysing the data in order to establish the veracity of the answers to the research questions.

4.3.1 Concrete research design paradigms

According to Labaree (2013) there are a number of different concrete research design paradigms, namely action research, case study, causal, cohort, cross-sectional, descriptive, experimental, exploratory, historical, longitudinal, observational, philosophical and sequential designs. Schaie (as cited in Baltes, 1968) described longitudinal and cross-sectional research as the traditional research design paradigms for age-operative associations.

The concrete research design paradigms from the above list that are relevant to this research study are cohort design and cross sectional design. Longitudinal research design will, however, also be commented upon**.**

4.3.1.1 Cohort research design

Labaree (2013), posits that a cohort study observes the statistical happening within a focused category of people with the same or similar attributes which are connected to the research question being investigated. Several cohorts are involved in this current research study, namely persons aged between 40 and 49, persons between 50 and 65, persons under 40, and males and females.

4.3.1.2 Longitudinal research design

John Clausen is regarded as the originator of the longitudinal approach to the study of the life course and was able to demonstrate the legitimacy of this approach (Riley, 1998). Giele and Elder (1998b) as well as McCrae and Costa (2003) are unequivocal that a longitudinal design is the optimal way to investigate various aspects of the aging process. It is also postulated that some type of longitudinal framework in life course studies is unquestionably important (Giele & Elder 1998b).

The major difficulties with longitudinal research studies, however, are that they take a very long time and they are very expensive to run (McRae & Costa, 2003). Longitudinal studies would, accordingly, seem to be the design of choice for research done by institutions such as universities or research councils such as the HSRC in South Africa, where time is not of the essence, and there is adequate funding and sufficient researchers available. For this current research study, and indeed most doctoral projects, unless relevant historical data are available to enable a retrospective study, time, finance and the presence of only one researcher precludes a longitudinal study. Furthermore, there are also no historical data available in South Africa in the field of midlife transition which makes a longitudinal approach impossible. Nevertheless, some data from this research study would enable a part longitudinal approach, in the future namely, some of the Big Five personality dimensions of E, N and O. Historical data on the Big Five personality traits are available for some 90 individuals who participated in the survey and three of these factors have been measured in this project. McRae and Costa's (2003) assertion that personality traits do not change significantly over time could thus be tested by other researchers as it is beyond the scope of this research study. The data

base from this research study will also be available to future researchers who may wish to convert this study into a longitudinal study.

Riley (1998, pp. 39-40) referred to a “quasi longitudinal design” where synthetic cohorts “piece together phases of lives of a cross section of people who differ in age”. What is needed in this regard is knowledge of how the groups have advanced at contrasting periods, locations and circumstances. Although groups across people who differ in age will not be part of this research study it could be the subject of a separate study for future researchers.

4.3.1.3 Cross-sectional research design

Cross-sectional designed research takes place at a particular point in time and compares data from a discernible cohort or sub-cohort of persons inside society at the same point in time (Coolican, 2004). Cross-sectional research uses questionnaires or survey techniques to gather data. As such, cross-sectional research studies are, by comparison to longitudinal research studies, much more cost effective and can be done quite quickly (McCrae & Costa, 2003). The major constraint of cross-sectional research is that it can only gauge the difference between or from people, groups or phenomena rather than changes in these people or groups. Using a cross-sectional design does, however, enable the establishment of relationships between variables at a given point in time, as well as approximating the frequency of a consequence if the sample is taken from the entire population (Barratt & Kirwan, 2009).

McCrae and Costa (2003), however posited that notwithstanding their view of longitudinal design being the optimal research design for studying aging, cross-sectional studies are indispensable as an instrument for assessing the significance of age changes on personality.

4.3.2 Retrospective versus prospective research design

A further aspect of research design relates to whether the research will be retrospective (looking backwards) or prospective (looking forward). Although this is elaborated upon below it should be noted at the outset that cohort specific, longitudinal and cross-sectional studies can all be either retrospective or prospective. This current research study will, of necessity be retrospective in nature.

According to La Morte (2013) research studies can also be classified as prospective or retrospective based on when any after-effects materialise in relation to the enlistment of the cohort. The distinction of a prospective cohort study is that at the juncture that the researchers begin enlisting participants and accumulating foundational detection data, none of the participants has developed any of the after-effects of interest. In contrast, with retrospective research studies, individual information is sought after the after-effects have already occurred.

Although a retrospective research study permits the acquisition of considerable former data from a single survey, its biggest disadvantage is the problem of memory, namely the inability of individuals to remember events at all as well as memory error such as what the meaning of the event was at that time in the 'there and then'. Prospective research studies, on the other hand, remedies the memory and meaning issues as it is accessed in the 'here and now'. However, possible loss of respondents due to death or relocation, and the time and expense are the disadvantages of prospective research design.

An interesting angle on tracing lives in retrospect is the concept of "analytic and perspective time" (Winston cited in O'Rand, 1988, p. 72). Analytic time reveals "transitions, trajectories, careers, cohorts and generations", whereas

perspective time reveals “identities, actions and choices” (O’Rand 1988, p. 73). The ‘presently understood past’ is how a respondent describes events or feelings or situations that have taken place in the past in terms of that person’s understanding or experiences of the event in the ‘here and now’. This may be very different to how the person understood or experienced the event at the time of occurrence in the ‘there and then' (O’Rand, 1988).

4.4 RESEARCH METHODOLOGY.

The distinction between research design and research methodology is, on the surface, not immediately clear as both concepts are defined as ‘how to’ conduct the research (Coolican, 2004, p. 20; Trafford & Lashem, 2008, p. 104). However, Thomas (2010, p. 292) defined research methodology as “how the researcher goes about practically finding out how what s/he believes, can be known”. In other words, what methods will be used to carry out the research, and why.

The traditional methodological approach to describing the research to be done is in terms of the quantitative or qualitative nature (Trafford & Leshem, 2008). However, recently a third approach has been identified, namely, a mixed methodological approach where an amalgamation or combination of a minimum of one quantitative and a minimum of one qualitative element is included (Bergman, 2009). The reasons for mixed methods research being defined as a separate methodology will be elaborated upon below.

4.4.1 Quantitative research methodology

This methodological approach, sometimes also referred to as a deductive approach, has as its fundamental underlying principle that the only significant occurrences are those that can be unequivocally discerned and quantified (Coolican, 2004). This basic assumption is, furthermore, a central principle of the philosophy of research paradigm of positivism (Coolican, 2004; Terre Blanche et al., 2006; Thomas, 2010; Trafford & Leshem, 2008). According to

Bergman (2009), the quantitative research approach assumes one unique truth as well as the presence of value-free research and also a search for the detection of all-embracing laws of effect. The quantitative methodological research approach was dominant amongst psychologists in the 20th Century until the early 1980s. At that time qualitative research methodology was explicitly associated with the philosophy of research paradigm of constructivism (Bergman, 2009). This, together with the development of applied psychology into new fields, brought about criticism of the attempted quantification of any and all psychological phenomenon as being "pseudo-scientific" and dehumanising (Coolican 2004, p. 45). According to Terre Blanche et al. (2006) researchers favouring quantitative methods are of the view that the adjustable practicality of the qualitative school of thought is unscientific and partiality is shown by the researcher in carrying out the research.

4.4.2 Qualitative research methodology

The qualitative methodological research approach emphasises meaning, experiences and descriptions (Coolican, 2004) and is also referred to as inductive research (Terre Blanche et al, 2006). Bergman (2009) noted the aspects traditionally ascribed to the qualitative approach as being, inter alia, that (i) there is more than one reality, or reality is non-existent (always subjective and socially constructed); and (ii) context is vital, but proponents of this approach believe that the quantitative approach does not take this into account. Terre Blanche et al. (2006, p. 36) noted that qualitative researchers often find the fixed designs of quantitative researchers to be "restrictive and unsuited to exploratory and inductive research". These views and assumptions are controversial and have contributed to the so-called "paradigm wars of the 1980s" (Bergman, 2008).

4.4.3 Mixed research methodology

Coolican (2004) argued that using both quantitative and qualitative methodologies in research enable a position to be taken on the value and role of both these methodologies. Most research studies start with a qualitative observation which can then often be quantified. Furthermore, it is quite possible to quantify qualitative data which is frequently done and, in addition, it should be noted that quantitative data can often be enhanced by qualitative data (Coolican, 2004). According to Bergman (2009), mixed research methodology enables the study of the same data from both approaches, which results in a deeper understanding of a concept, phenomenon or finding. Another advantage of a mixed methodological research approach is that following a purely quantitative approach with collections of statistics and analysis thereof, does not often facilitate a proper understanding of meanings, beliefs and experiences, which are better understood through qualitative data.

Bergman (2009, p. 12) put forward the view that the debate as to whether qualitative or quantitative research approaches have more value needs to be surmounted and that a more comprehensible approach is to ask "Why and how can methods be mixed?"

4.4.3.1 Exploratory, explanatory and descriptive research methodology

According to Creswell, Plano Clark and Garrett (2009), the exploratory, explanatory and descriptive research aspects within a mixed methodological approach are important when it comes to sampling. An explanatory methodology would be a quantitative data collection as Phase 1 followed by a qualitative analysis or comparison of results as Phase 2. This qualitative follow up could entail a sub-set of the original sample being used for second-phase data collection.

An exploratory design would be where the group for the Phase 2 qualitative follow up would not typically come from the same group subjected to the quantitative Phase 1.

Terre Blanche et al (2006) defined exploratory research as initial enquiries into comparatively unfamiliar research terrains, which also result in novel insights into a phenomenon. Causal explanations of phenomena would fall under Durrheim‘s (2006) definition of explanatory research when the question is asked: Does one variable cause another for example, does smoking cause cancer?

An additional research type is added, namely, descriptive research. This type of research involves the description of the characteristics of a phenomenon but it does not describe when, why or how the phenomenon operates. Descriptive research does, however, require accurate and reliable observations (Terre Blanche et al. 2006).

This current research study started with an exploratory approach in the form of a focus group and pilot study and a further survey, using mostly quantitative methods, was then utilised. This was followed up with both descriptive and explanatory research approaches using some qualitative methodology. This was done by analysing the self-expressed definitions of the so-called midlife crisis by respondents as well as the self-expressed features of the midlife crisis by those respondents who surmised that they had experienced a midlife crisis.

4.4.3.2 Integrating information gathered and meta-inferences

Tashakkori and Teddlie (2009, p. 101) postulated a concept of meta inference which is an “[o]verall conclusion, explanation or understanding developed through an integration of the inferences obtained from the qualitative and quantitative strands of a mixed

method study which neither the quantitative [n]or qualitative perspectives can do alone".

Furthermore, a major reason why a mixed method research approach is unique is that it contemporaneously deals with both exploratory and confirmatory questions. The qualitative investigation (exploratory approach) can be structured in such a manner as to confirm the quantitative results.

4.4.3.3 The need for caution with a mixed methods research strategy

Bryman (2009) postulated a view that the use of mixed methods research must be justifiable and should not merely be used because it is fashionable to do so. Moreover, by clarifying the reasons for using mixed-methods research designs, the nature of the qualitative and quantitative components of the research and how they were used in combination will be known to readers of the research findings and well understood by the researcher. According to Bryman (2008), a mixed-methods research approach should only be used when particular research questions can only be satisfactorily answered by such an approach. Bryman (2009) also posited that the over use of metaphors such as 'triangulation' or combining breadth with depth causes a situation where there is no common language and that researchers ought to clearly explain what is meant when using metaphors.

4.5 RESEARCH METHODS

While research methodology refers generally to the strategy or underlying theory and analysis of how research will be conducted and incorporates qualitative, quantitative or mixed method approaches, the term research methods refers to the technique/s of gathering information or data and the analysis thereof. Clarke (2005) defines research methods specifically as methods used to:

(i) unearth the presence of;
(ii) single out the utility, importance and magnitude of; or
(iii) indicate the semantic meaning between one or more concepts identified in a model from which statements are made.

According to Chow (2002, p. 8) three types of research methods are available to psychologists, namely; non-experimental, experimental and quasi experimental. These three types are differentiated by the extent to which controls are present. What is meant by control is what measures are available to exclude alternative explanations of the research data. Non-experimental methods do not include any controls while experimental methods do have all necessary controls built in to them. If one of the possible controls is not included in the research method, then that method is regarded as quasi experimental. The choice of which above three research methods to use will depend on the nature of the research project. Colman (1995) observed that the essence of the research question often constricts the research methods deployed to explain it.

Within each of the three research methods mentioned above, there are also multiple types of data collection. For example, in the case of a non-experimental method, the common types of research methods are interviews, psychometric measurement and observation (Chow, 2002). The approach in the current research study will be non-experimental using a comprehensive survey for data collection purposes.

4.5.1 Surveys

Neville (2007) distinguished between descriptive surveys which seek to detect and count frequencies of response, and analytic surveys that analyse the similarity between variables within the sample. Both of these methods will be used in this current research study.

4.5.2 Interviews

Interviews are typically structured, unstructured or semi-structured. Structured interviews consist of specific questions which are asked and the interviewee is kept focused by the interviewer. Unstructured interviews have no specific questions while semi-structured interviews have general questions, but the interviewee responses are taken as is. Interviews are not be used in this research study for the reasons put forward in Sections 3.1 and 3.2

4.5.3 Sampling, data collection and analysis

Important practical questions when conducting research are: (i) where to find enough subjects for the research; and (ii) how to obtain sufficient data from them? Notwithstanding these questions, most researchers will have a 'population of interest' in mind during the process of formulating the research questions (Brown, Cozby, Kee & Worden, 1999). To facilitate this process, the type of sampling is relevant. A distinction in this regard between probability sampling and non-probability sampling is helpful (Brown et al., 1999; Terre Blanche et al 2006; Neville, 2007). The purpose of the research determines which of these methods of sampling should be used. Accordingly, if accurate generalization is required then probability sampling is appropriate, and large random samples from the population of interest will have to be found (Brown et al., 1999; Neville, 2007). Unfortunately, obtaining a probability sample for a doctoral study into an unstudied field in South Africa is impractical and unattainable. A method of non-probability sampling which enables a smaller sample is known as volunteer sampling and is especially appropriate if the "relationship between variables" is being studied rather than an accurate description of a population of interest (Brown et al., 1999, p. 102). Terre Blanche et al (2006, p. 139) stated that probability sampling is "expensive and difficult to obtain" and that the "vast majority of student work

is carried out with non-probability sampling", which they find "more than adequate for research purposes". The sampling method for the current research study will, therefore, be a non-probability volunteer sampling method.

4.5.4 Statistical analysis

The statistical analysis in the current research study consists of:

- Principal component analysis where components identified will be given operational definitions.
- Multivariate analysis of the components established with biographical, temperamental, ways of coping data and the self-reported midlife crisis descriptions.
- Text analysis of the self-reported midlife crisis definitions and experiences will be undertaken and multivariate and descriptive analysis carried out on this data.

  Individual reports for all 220 respondents will then be compiled and sent to them.

Full details of the statistical analysis to be utilised will be covered in Chapter 5.

4.6 RESEARCH ETHICS

According to Wassenaar (2006) the essential purpose of research ethics is to protect the welfare of the research participants. Wassenaar (2006, p. 67) identified four ethical aspects that need to be considered:

Free will and veneration of the self-esteem of the participants. In this regard the principles of informed consent and confidentiality were emphasised. Informed consent and confidentiality were attained through a paragraph on informed consent on the opening page of the survey and only

through consent could the participant move to the next page. Confidentiality was achieved by not requesting names, race group, telephone numbers or any further personal detail. Only e-mail addresses were requested in order to send the report (see Appendices 10 and 11)

Non-maleficence. This ensures that there is no harm or wrong done towards participants. The questions were carefully chosen and worded to avoid any potential negative feelings being generated by answering the questions in the survey, and also, they allowed for participants to contact the current researcher with any concerns. No concerns were raised by any participants.

Beneficence. This relates to maximum benefit to participants. This was achieved by sending out comprehensive reports to all participants and inviting comments and communications and offering personal meetings to all participants who requested it.

Justice. This ensures that participants receive what is due to them, are fairly selected and sufficient, and that relevant care is provided to participants who may become distressed. The justice as well as sufficient and relevant care was exercised by ensuring that the constructs in the reports for each participant were carefully and sufficiently worded to minimise any possible misunderstanding. All participants were also invited to contact the current researcher by e-mail or cell phone if they had any concerns or needed any clarification in regard to the reports. Five of the participants requested clarity by e-mail and two of the participants requested a meeting which took place.

4.7 RESEARCH DESIGN, METHODOLOGY AND METHODS OF THIS CURRENT RESEARCH STUDY

4.7.1 Introduction

The boundaries of this current research study are that a sample of over 200 people will be adequate in terms of set standards. Tabachnic and Fidell (cited in Pallant, 2004, p. 54) claim that 200+ cases constitutes a “large sample”.

Further to the discussion in this regard in Section 4.3, McCullum, Widaman, Zhang and Hong (cited in Field, 2009) argued that the sample-to-variable ratio in factor analysis is important and if communalities are within the 0.5 range then a sample of between 100 and 200 research participants is sufficient.

A further aspect that must be accounted for in the current research study is the socio-economic status of the sample. The quantitative measures are done online so it is necessary that the respondents must be computer literate and have access to a computer and the internet. This means that the sample will, in all likelihood, be limited to those South Africans in the so-called middle socio-economic class or higher. The sampling is done according to the non-probability method and the individuals who were recruited were all from management positions. A similar situation prevails in the USA and Poland where, due to the same logistical problems most studies on similar topics were done on middle-class individuals, (Levinson et al., 1978; Oles, 1999; Tamir, 1982; Wethington, 2000).

Another relevant aspect discussed in Chapter 1 is the issue of longevity as per Section 1.2.1. International research findings demonstrated that social class impacts upon longevity (Herd, Goesling & House 2007). The same applies to South Africa. The current longevity figure is reported as 57.7 years for males and 61 years for females (Statistics South Africa, 2013 report P0302 p. 8.). The age bracket statistics according to race reveals, however, that the life expectancy of the white population is much higher than for Africans. Forty two percent of the white population is older than 40 while only 18 percent of the African population is older than 40 years. If these data for whites are proportionately stripped out of the overall life expectancy figures for the country, the life expectancy for the African part of the population is more accurate and much lower than 57.7 percent and 61 percent respectively. In conclusion, it is postulated that to be able to make meaningful comparisons

with the results of international studies on similar topics, the research sample for the current research study will have to be drawn from middle-class South Africans of all races and genders.

The research survey used is both descriptive and analytic. On the one hand it seeks to detect and count frequencies of response and, on the other, it analyses the similarity between variables within the sample. The sampling method for this research study is non-probability volunteer sampling. This was done by sending e-mails to available mailing lists inviting participation in the research survey.

Giele and Elder (1998b) postulated that whenever possible, life course studies should collect life course data on:

- historical context;
- location;
- relationships in family and work and other social settings;
- linked lives;
- health wellbeing; and
- subjective aspects of meaning and satisfaction and event histories in major domains of activity (timing).

4.7.2 Focus groups and pilot study

This research study started with an exploratory approach in the form of two focus groups. One group consisted of 16 consulting psychology students (see section 1.2.3 Chapter 1, p.16) and a second group of six graduates over the age of 35 who considered their midlife experiences. In these focus groups the themes of death, depression and dissatisfaction arose as did additional issues such as values, career and mentorship. This was followed by a pilot study. For the pilot study Oles' (1999) 76-item Midlife Crisis Questionnaire (MCQ) was used to which were added a further 45 questions, developed from the issues arising from

the focus groups. This 131-item questionnaire was sent to 68 people aged over 35 years of which 58 responded. The data was factor analysed using principal component analysis and three factors were found. One factor similar to Oles' (1999) factor (which he named "intensity of midlife crisis") had significant factor loadings. This was, followed by a factor related to values, and a third factor related to generativity. The 44 items with factor loadings from 0.6 to 0.8 in these three factors were identified for inclusion in the main survey. According to Guadagli and Velicer (cited in Field, 2009, p. 547) "[i]f a factor has four or more loadings greater than 0.6 then it is reliable regardless of sample size. Furthermore factors with 10 or more loadings greater than 0.4 are reliable if the sample is greater than 150".

4.7.3 Main survey (see Appendix 1)

A sample of individuals representing middle-class candidates in junior to senior management positions was subjected to measurement of the key constructs through quantitative methods as well as qualitative measures of some items. The measures were determined by reference to some of the dimensions of the conceptual framework of midlife transition to establish if there is a distinction (and if so, the extent thereof) between those who have/are experiencing a midlife crisis as defined, and those who have not had a crisis or whose crisis is acute as opposed to a chronic experiencing of a crisis.

Respondents were all recruited by e-mail from individuals on a number of mailing lists, namely:

- individuals who had been assessed by a Cape Town consulting psychology practice, with whom this researcher is associated. The respondents were all part of internal talent management programmes in a number of large companies in South Africa and were assessed by the psychology practice.

- management training and development company who provide courses for all levels of junior, middle and senior management in South Africa.
- This researcher's own contacts – business and social acquaintances.
- Consulting psychology doctoral students from UNISA.

The total number of people who were contacted was 830 and a total of 249 respondents took part in the survey (30% response rate). The respondents included men and women as well as blacks, whites and coloureds. The snowball method of sampling was also used where the e-mail respondents were asked to circulate the survey request to business associates, friends and relatives. All those who did not respond after the first e-mail were sent a second and third e-mail (Durrheim & Painter, 2006).

Although a total of 249 respondents participated, some of these respondents did not complete the whole survey. It is surmised that they were disturbed by someone while completing the survey or became disinterested. A final sample of 220 people who had completed the entire questionnaire was, therefore, identified for the data analysis.

The following aspects formed part of the survey:

4.7.3.1 Biographical information

Bruckner and Mayer's (1998, p. 161) life course approach of data collection was followed where the thematic areas used were "educational history, residential (including family) history and employment history". Within these themes, data on relationships with friends and family were also gathered as were attitudes towards religion during childhood and adulthood. The sections were as follows:

- Geographical details.

- Childhood and adolescence experience including parenting, siblings, socialisation, schooling and further education, religion and family relationships.
- Non-family relationships.
- Life satisfaction.
- Employment including job level, industry, and employment changes during midlife transition period, job satisfaction.
- Personal relationships including marital status.
- Health issues.
- Achievements including academic, sporting, workplace, community, societal, leadership and office-bearership.

4.7.3.2 Life transition issues

Four sections of 72 items with regard to transition issues were included, namely:

- **Physical aspects**: including fatigue, body dissatisfaction and physical wear and tear.
- **Conflicted issues**: the themes in this section included employment, relationships, self-image, values and generativity.
- **Worry issues**: such as presence of anxiety and depression about death and aging.
- **Transition issues:** the 44 items from the pilot study were included here.

4.7.3.3 Temperament

Three of the big five factors of McRae and Costa (2003) were included namely **Extraversion, Openness to experience** and **Neuroticism**. Respondents were asked to describe their temperament on a 10-point scale on six of the aspects of each of the three factors and this was

further divided into: temperament at work; within the family; and in personal relationships, in order to examine whether temperament in different roles was distinguishable.

4.7.3.4 Ways of coping

The WCQ of Folkman and Lazarus (1986) as utilised by Oles (1999) was used in this project.

4.7.3.5 Definition of midlife crisis, frequency of phenomenon and description of experience

Respondents were asked to define what they thought was a midlife crisis as well as whether they had had one, and if so, they were asked to describe the experience.

4.8 RESEARCH OBJECTIVES AND RESEARCH QUESTIONS.

4.8.1 Research objectives

The overall aim of this research study is to explore the concept of midlife transition in South Africa and to investigate whether the popular experience, termed midlife crisis, exists in South Africa and if so, is it indeed a crisis? If it is found that the concept of a midlife crisis does exist it could lead to the establishment of an operationally sound definition of midlife crisis in the South African context. The main features of this research study will be an attempt to:

(i) replicate, in South Africa, the work of others in the United States and elsewhere (for example Poland and Holland);,

(ii) create a new understanding of some existing insufficiently researched aspects thereof, such as the link between personality factors and the experience of midlife crisis; and

(iii) establish a methodologically sound method of measuring why and how individuals experience midlife transition and possibly a midlife crisis, namely:

- The percentage of people who experience the so-called midlife crisis.
- The variation in the intensity of the midlife crisis from moderate to severe.
- The age span at which midlife transition and/or midlife crisis occurs.
- The impact of increased longevity on the onset age at which the midlife crisis occurs would also be established.
- To establish an assessment process and tools for determining whether a midlife crisis is occurring.
- To build a conceptual model of what factors may impact on a midlife crisis with each dimension of the model unpacked, defined, and measurable and with the weighted contribution of such dimensions to a midlife crisis being determined.
- The establishment or proposal of a solution for preventing and/or minimising a midlife crisis becoming chronic for those individuals who may be predisposed to having one.

4.8.2 Research questions

The specific research questions as discussed in Chapter 1 are mentioned below. The research methods used to gather and analyse the data are dealt with in Chapter 5.

1. Is there an age period during which midlife transition and midlife crisis takes place?

2: Can the self-reported definition and experience of midlife crisis, be converted to quantifiable values for analysis?

3: Are there significant age and gender cohort differences in the self-reported definition and experience of midlife crisis?

4: Is there a methodologically sounder way of measuring whether a midlife crisis is being, or has been, experienced?

5. What is an operational definition of a midlife crisis?

6. Is the midlife crisis measuring tool (MTQ) a valid measure of a midlife crisis?

7. How does the quantified self-reported experience of midlife crisis compare to the MTQ components as a predictor of midlife crisis?

8. How does the quantitative research output of the current research study compare with the work done by Oles (1999) and his associates?

9. Does midlife transition and possibly midlife crisis occur later than previously thought, due to increased longevity?

10. Is there a variation in the experience of the midlife crisis from moderate to severe?

11. Does the MTQ analysis reveal any particular personality characteristics, biographical factors and/or ways of coping that are related to the components of stagnation and death/aging anxiety?

4.10 SUMMARY

This chapter has sought to provide a detailed explication of the research approach adopted by the researcher for the current research study. The chapter furthermore provides the link between the relevant theory from the literature review discussed

in Chapter 2 and the research objectives and questions posed in Chapter 1 of this thesis.

Chapter 5 will deal with the data gathered by the researcher and the analysis thereof.

CHAPTER 5

QUANTITATIVE DATA ANALYSIS AND RESULTS

5.1 INTRODUCTION

Two hundred and forty nine adults, of both genders, aged between 31 and 70 years, were recruited to participate in this research study (see Chapter 4, Section 4.7). The individuals completed the online questionnaire and the sample was subsequently reduced to 220 participants after some incomplete records were eliminated. The 220 research participants consisted of 115 males and 105 females. The survey contains many questions which could be discerned by some as deeply personal and accordingly it was decided not to request participants to state their names or race group. It was reasoned that this would ensure that more people would complete the survey, fewer would submit socially desirable responses and the sensitivity of the race issue in present day South Africa would be taken into account. E-mail addresses were requested to enable the individual reports to be sent to participants.

For the purposes of the current research study the age splits of the 220 research participants were:

(i) 49 individuals below age 40;
(ii) 95 individuals aged between 40 and 50; and
(iii)76 individuals above 50.

The research data was analysed by age group and gender as well as without any splits by age or gender. The data analysis was done by means of techniques in the Statistical Package for the Social Sciences (SPSS).

The Comprehensive s Online Survey referred to in Chapter 4 (See Appendix 1) enabled the collection of individual datasets for five key aspects in this research study, namely:

- Seventy midlife transition and crisis questions in the Midlife Transition Questionnaire (MTQ).

- Forty-two biographical data items (BIODATA).
- Six facets of three of the Big Five personality traits, namely neuroticism, extraversion and openness – divided further into three environments, namely experience at work, experience within the family milieu and experience in relationships. Thus a total of 54 items were included on the three personality dimensions or (BIG FIVE).
- Forty nine items from the WCQ.
- Qualitative data on the definition (DEFINITION OF MLC) and possible experience, or not, of midlife crisis (EXPERIENCE OF MLC). This qualitative data was text analysed which enabled the conversion to numeric data covering four themes in the midlife crisis definitions section (including no theme) and four levels of midlife crisis experience (including no experience).

The purpose of this chapter is to report on and discuss the results and findings of the statistical analysis of the data after using IBM SPSS statistical data analysis program (version 22).

5.2 STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES (SPSS).

The three major statistical features of SPSS that were used in the data analysis for this current research study were descriptive statistics, principal component analysis (PCA) and multiple regression analysis (MRA).

5.2.1 Factor analysis (FA) and principal component analysis (PCA)

According to Field (2009) social scientists often try to evaluate concepts which cannot be quantified unequivocally. In the current research study midlife crisis is such a concept and factor analysis (FA) or principal component analysis (PCA) is a means of measuring aspects of the concept.

The terms factor analysis and principal component analysis are often used interchangeably (Pallant, 2004). According to Guadagnoli and Velicer

(cited in Field, 2009, p. 639) the "solutions generated from principal component analysis differ little from those derived from factor analysis". If there are more than 30 variables and few low communalities (less than 0.4) then little difference is likely. Accordingly principal component analysis is preferred by many researchers (Field, 2009). According to Pallant (2004) principal component analysis (like FA) attempts to reduce the research data into smaller understandable sets of data. Field (2009, p. 628) posits that the occurrence of "clusters of large correlation coefficients between subsets of variables suggest that those variables could be measuring the aspects of the same underlying dimension" and refers to such dimensions as latent variables.

Principal component analysis also achieves the research objective of parsimony by the reduction of a data set or interrelated variables to a smaller set of factors which facilitates better understanding of the research data. The component scores, in turn, can then be further analysed by means of, for example, multiple regression analysis. Principal component analysis was accordingly the preferred method used in the current research study.

5.2.2 Sampling adequacy

The adequacy or reliability of the output from PCA is significantly influenced by sample size (Field, 2009) and the strength of the relationships between variables (Pallant, 2004). Regarding sample size there are differences of opinion for example Nunnally (cited by Field, 2009) recommends 10 research participants for each variable whilst Tabachnick and Fidell (2006) suggest that five participants per variable is adequate in most cases. These requirements for all sections of the survey were met and in fact significantly exceeded (See section 5.1). Insofar as the strength of inter-correlations amongst items is concerned Tabachnick and Fidell recommend the use of coefficients greater than 0.3.

Another method of determining sample adequacy is by ensuring that variables with low communalities are removed from the analysis (Field, 2009). This is determined by the sample size as well. With a sample size of 220 in the current research study variables with communalities less than 0.35 in all sub groups, such as age or gender groups, were removed.

A final alternative for establishing reliability of output is to use the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. Kaiser (cited in Field, 2009) recommends accepting KMO values above 0.5. Therefore, any value below 0.5 would indicate that PCA is unsuitable for analysing a data set. If the KMO is between 0.5 and 0.7 this is regarded as acceptable, whilst KMO values between 0.7 and 0.8 are regarded as good.

One method suggested by Field (2009) for improving both results and the KMO, is to reduce variables that have low correlations with other variables. Consideration should be given to excluding variables with correlation coefficients below 0.4 (Field, 2009). This reduction process was carried out on all datasets for which PCA was performed, namely the MTQ data, BIODATA, the BIG 5 data and the WCQ data.

5.2.3 Factor or component extraction

The process of factor extraction involves the determination of the smallest number of factors that can be used to best represent the inter-relations among a set of variables. One method of doing this (Field, 2009; Paillant, 2004) is to only retain factors with large eigenvalues. Determining what constitutes a large eigenvalue can be achieved by a number of methods. One such method is examining the scree plot which is part of the factor reduction process in SPSS. The scree plot provides a visual depiction of the relative strength of each factor. According to Cattell (cited in Field, 2009, p. 639) the "cut off point for factor retention is at the point of inflexion of the scree curve".

Factor selection cannot be solely dependent on the scree plot and it has been suggested by Kaiser (cited in Field, 2009) that eigenvalues greater than 1 should

also be a criterion. However, Field argues that this overestimates the number of factors to retain and he suggests that the communalities of the factors need to be considered as well. All three methods of factor selection were used including the variable removal process with communalities described in Section 5.2.1 above.

Finally, the actual variables that load onto the components have to be studied in order to decide on a provisional title for the components. During this process in this current research study, three components were initially extracted for the MTQ (notwithstanding the fact that the scree plots for most data splits indicated that two components should be extracted). It was clear from studying the variables loading on component three that it was a general component including aspects of component 1 and 2 which made it difficult to define even provisionally. With the extraction of 2 components the same variables loaded on all the data splits which would indicate that this was the correct approach. Consequently, it was decided to only extract two components for the current research study.

5.2.4 Factor rotation

One of the options to improve interpretation in principal component analysis is to use factor rotation. There are two types of rotation – orthogonal and oblique. With orthogonal rotation the factors remain uncorrelated, while with oblique rotation the factors are allowed to correlate. The choice of which type of rotation to use depends, according to Field (2009), on whether there is a theoretical reason to suppose that the factors should be related or independent. An approach to deciding on which method to use, is to run both types and examine the results. Pedhazur and Schmelkin (cited in Field, 2009, p. 643) suggest that if oblique rotation reveals a negligible correlation between rotated factors then orthogonal rotation should be used. Field (2009, p. 644) concludes that orthogonal rotations are a "complete nonsense for naturalistic data and certainly data involving humans". As such, he postulates that Oblimin rather than Varimax rotation should be used and was accordingly employed as the preferred method for the current research study.

5.2.5 Factor loadings

Field (2009) asserts that factor loadings are an assessment of the intrinsic significance of a specific variable to a particular factor. Factor loadings greater than 0.3 are generally considered as important by researchers (Field, 2009). Sample size is, however, a moderator of the significance of a factor loading according to Stevens (cited by Field, 2009) who recommends that, for a sample of between 200 to 300 participants a factor loading of .364 is adequate. Nevertheless, Stevens (cited by Field, 2009) recommends using factor loadings with a value of at least 0.4 which was the value used in the current research study.

5.2.6 Factor or component scores

The SPSS calculates composite factor or component scores for individuals by using the constituent scores of the variables associated with a particular factor. There are a number of methods which can be used by the SPSS to calculate factor scores namely the regression method, the Bartlett method and the Anderson-Rubin method (Field, 2009). The latter method is recommended by Tabachnick and Fidell (2006) as it produces uncorrelated factor scores with a mean of 0 and a standard deviation of 1, being a normal curve. The importance of factor or component scores are that they can be used for further analysis such as multiple regression rather than using the original data or having to calculate weighted scores which is regarded as cumbersome (Field, 2009). The Anderson-Rubin method was used for all principal component analysis in this current research study.

5.3 RESEARCH OBJECTIVES, QUESTIONS AND FINDINGS

The research objectives as formulated in Chapter 1 of this thesis enabled the formulation of 11 research questions to be answered in order to fulfil these objectives. These research questions are listed below together with research data captured using the comprehensive survey (See Appendix 1) and the results of the data analysis together with the findings thereof.

Question 1. Is there an age period during which midlife transition and midlife crisis takes place?

The construct of midlife transition is well accepted by researchers and was discussed in Chapter 1 (See sections 1.1.2 - 1.1.4 and 1.2.1). Accordingly, a major basic assumption of this research study is that a midlife transition period does exist. However, there is no a priori assumption made as to how long that period is or exactly when it commences or ends.

There are also many differing views and questions posed regarding the concept of midlife crisis, such as: What if anything, constitutes a midlife crisis? How many experience it? When is it experienced and what are its features? These aspects will be explored in some of the later research questions presented below.

Age has always been an important variable in any study of midlife transition or crisis. Some researchers (Lachman, 2001; Tamir, 1982) theorised that the timing of certain events (such as death or illness of a parent) is inevitable during the age band of 40 to 60 years. This is probably more relevant to a possible crisis in midlife than age or an age range (Lachman, 2001). Other researchers (McAdams, 1993; Tamir, 1982) have used age in their studies as this is simpler for research purposes.

This current researcher decided to use an age band for the midlife transition period. It would have required considerably more data from respondents to test the timing of inevitable event theory as posited by Lachman (2001). To collect this additional data would have affected the time taken by recipients to complete the survey and could well have put many people off participating in this research study. Other researchers using the data base of the current researcher could research this aspect in the future.

If age is to be used, the consensus seems to be that the transition period will fall somewhere between age 40 and 50 years (McAdams, 1993; Oles, 1999;

Tamir, 1982; Wethington 2000). Before finalising the age to use as the lower cut-off point for the transition period, the current researcher analysed the results using each year from 35 to 39 years as the lower cut-off point. There were insufficient individuals in the total research sample below the age of 35 to use this age as the lower cut-off point for entrance into middle age as per Jung (1933), and the KMO test for sample adequacy for the group younger than 35 was very low (coefficient less than 0.3). Even when age 39 was used as the lower cut-off point the KMO test for the group younger than 39 was still inadequate. Although Field (2009) avers that KMO values less than O.5 cannot be accepted for principal component or factor analysis, he does state that a KMO of 0.5 is adequate providing the sample size is over 200 research participants which is the case for this current research study. It was also important to have significantly large enough cohorts younger and older than the transition group in order to make a viable comparison between cohorts. To meet these requirements the acknowledged age band of 40 to 50 years of age was decided upon for the current research study for the deemed midlife transition period. This was decided upon as the lower cut off age of 40 years for entrance into midlife transition was proven to be acceptable as there were many significant differences between the cohort below age 40 and the transition cohort aged between 40 and 50 (See Table 5.4). Furthermore, the KMO coefficient for the cohort less than age 40 proved to be quite adequate at 0.61.

The three age groups used in the current research study are, therefore, as follows:

(i) younger than 40 (pre-midlife transition/early midlife);
(ii) forty to 50 years of age (midlife transition); and
(iii) above 50 (post-midlife transition/late midlife).

Question 2: Can the self-reported definition and experience of midlife crisis, be converted to quantifiable values for analysis?

It has been argued, as previously mentioned (Brim, 1992; Lachman, 1996, 2001; Wethington, 2000) that individuals do not accurately define a midlife crisis and also tend to overstate the nature of the experience. These beliefs by the individuals probably account for the continuing popular conviction by many that the midlife crisis will take place for almost everyone in some form or another. This view is held by many in spite of repeated research data demonstrating that a majority of people in midlife do not experience a crisis and that only a small minority of people do indeed experience it.

The validity of the abovementioned views were therefore explored and tested in the current research study as follows:

The 'popular belief' aspect was explored by means of two requests being made of the participants in Section 5.1 and 5.2 of the survey, namely:

(i) to define in their own words what they thought constituted a midlife crisis (See section 5.3.1 below); and
(ii) to state whether or not they experienced a midlife crisis and if so, what were the features of this crisis (see section 5.3.2 below).

The self-reported definition and experience of midlife crisis responses were heuristically analysed by means of text analysis of the responses from Section 5.1 and 5.2 of the survey. This was in regard to aspects of the literature study, the pilot study and the two focus groups (See Chapter 1, Section 1.2.3) as well as factor derivation from the text analysis.

5.3.1 Midlife crisis definition themes (Question 5.1 from the survey)

The heuristic text analysis of the definitions provided by the 220 research participants enabled the derivation of four themes which were provisionally termed as follows:

- Slowing down or standing still (which is worded as stagnating or immobility).
- Internal thinking or interiority (the term used by Neugarten, 1965).
- Concern about death and aging.
- Don't know.

5.3.2 Descriptive statistics of midlife crisis definition (Frequency distribution)

Table 5.1 contains the frequency distribution of all research participants. It is significant that 94 percent of the participants were able to provide a definition of midlife crisis which is very similar to Wethington's (2000) findings of 92 percent of research participants in the USA. Furthermore, the finding that over 44 percent of the research participants describe it in terms of interiority is also similar to Wethington's (2000, p. 91) findings that more respondents described it as "internally motivated than externally caused". Fifty percent of the research participants in the current research study defined midlife crisis in terms of stagnation/immobility and death/aging anxiety. The same components were also found in the principal component analysis of the MTQ (See section 5.3.4 below). This finding is dissimilar to Wethington's (2000) findings that only a small number of respondents explicitly connected the midlife crisis to impending mortality.

TABLE 5.1 Midlife crisis definition themes of all participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Stagnating - slowing	69	31.2	31.4	31.4
Internal thinking - Interiority	97	43.9	44.1	75.5
Concern about death – aging*	42	19.0	19.1	94.5
Don't know	12	5.4	5.5	100.0
Total	220	99.5	100.0	
Missing	1	.5		
Total	221	100.0		

*Death and aging (similar to the death anxiety findings of Dickstein, 1996 and Oles, 1998).

A four point numerical scale was then allocated to score each participant on the midlife crisis definition theme.

5.3.3 Midlife crisis experiences (Question 5.2 in the survey)

Responses to the qualitative self-reported experience of midlife crisis question revealed that many research participants were uncertain of the experience or even whether they had experienced a midlife crisis (27%). This was despite the non-inclusion of a 'not sure' option on the scale provided in the survey; that is, they were merely asked if they had experienced a midlife crisis or not and, if so, what the features were.

It was possible to text analyse the uncertain answers and to numerically code them into 'probably occurred' (on balance of probability did occur) and 'possibly occurred' (less likely than probable). The occurrence of an experience of midlife crisis could thereafter be coded into a four-point scale as follows:

1. Occurred.

2. Probably occurred (more likely on balance of probability).
3. Possibly occurred (less likely on balance of probability).
4. Did not occur.

5.3.4 Descriptive statistics of the midlife crisis experience of all participants

The frequency statistics for the responses of all participants as to whether or not they experienced a midlife crisis were as per Table 5.2 below. The number of research participants who indicated that they definitely experienced a midlife crisis was 32.6 percent which replicates Wethington's (2004) findings in the United States that 33 percent of respondents said they experienced a midlife crisis.

TABLE 5.2 Frequency of occurrence of midlife crisis

	Frequency	Percent
Occurred	72	32.6
Probably occurred	10	4.5
Possibly occurred	48	21.7
Did not occur	90	40.7
Total	220	99.5

5.3.5 Descriptive statistics of domains of midlife crisis experience

The descriptive narrative of the experience of midlife crisis which was requested of participants in this research study could not be text analysed as many simply answered this question with a 'yes' or 'no' without further elaboration. Even those who gave further information on the experience did so in such a vague fashion that it was incomprehensible.

The inference from this is that participants in this current research study know about the phenomenon possibly from the popular press but even those who say they experienced it are either unsure of their experience, as it is possibly partly or completely unconscious or alternatively, they were unable or unwilling to elaborate. It was however possible to text analyse the responses in terms of which domain they belonged to. The domains of family, work and personal internal experiences were apparent and thus extracted as follows:

1 = Work related concerns
2 = Personal internal issues
3 = Family issues
4 = Don't know or wouldn't say.

The distribution of the 82 people who said they definitely or probably experienced a midlife crisis according to domain is found in Table 5.3 below.

TABLE 5.3 Distribution of those experiencing midlife crisis by domain

	Work related concerns	Personal/ internal issues	Family issues	Don't know/won't say.
Distribution	25	35	6	16
Percentages	30.5	42.8	7.1	19.6

Question 3: Are there significant age and gender cohort differences in the self-reported definition and experience of midlife crisis?

The data from the self-reported definition and experience of midlife crisis were analysed across the three age cohorts and two gender cohorts. The results are as follows:

5.3.6 Age comparisons

Table 5.4 below contains data of the midlife crisis definition themes for each of the three age groups in the current research study. The first significant result is that concern with death and aging is highest amongst late midlife individuals over the age of 50 years (30%) compared with only 8 percent for the under 40-year-old group and 16 percent for those individuals between 40 and 50 years of age.

Internal thinking or interiority (the term used by Neugarten, (1965) is highest (51%) in the midlife transition group (40-50) and lowest in the late midlife's over 50 years of age (34%). Stagnating-slowing (in Table 5.4) is lowest in the midlife transition group (40-50 years of age) at 25.5 percent and highest in the below 40 and over 50 years of age groups 39 percent and 34 percent respectively. The significance of this finding is discussed in more detail in the narrative of research for Question 7 (See Tables 5.29 and 5.30) where the multiple regression coefficient for the transition group (40-50 years of age) with experience of midlife crisis (used as the dependent variable) and the three aspects as the independent variables is also lower than for the groups below 40 and over 50 years of age. This finding could be in line with Neugarten's (1965) theory of interiority as something that occurs in the transition years and could be more dominant than an experience of stagnation.

TABLE 5.4 Midlife crisis themes according to age cohort

	<40	40-50	>50
Stagnating/immobility	38.8	25.5	33.8
Internal thinking/Interiority	44.9	51.1	35.1

Concern about death - aging	8.2	16.0	29.9
Don't know	8.2	7.4	1.3
Total	100.0	100.0	100.0

5.3.7 Gender comparisons

Table 5.5 below shows that females have a 7 percent higher level of interiority than males while males' concern with death and aging is 5 percent higher than that of females. However, these differences are not considered to be sufficiently significant enough to draw any real conclusions. Gender does not accordingly seem to be a significant moderating variable for experiencing a self-reported midlife crisis according to the participants in the current research study.

TABLE 5.5 Midlife crisis definition themes by gender

	Males	Females
Stagnating - Slowing	31.3	31.4
Internal thinking/interiority	40.9	47.6
Concern about death - Aging	21.7	16.2
Don't know	6.1	4.8
Total	100.0	100.0

5.3.8 Descriptive statistics of the self-reported midlife experience by age cohorts

The age analysis is reported in Table 5.6 below. The percentage of research participants in the midlife transition group (40 to 50 years of age) who reported experiencing a midlife crisis (32%) is significantly higher than the pre-midlife transition group (younger than 40 years of age) where only 18 percent reported the experience. What is, however, of more significance is that an even higher percentage (43%) of the research participants over the age of 50 years reported an experience of midlife crisis.

TABLE 5.6 Frequency of occurrence of midlife crisis by age group

	< 40	40-50	>50
Occurred	18.4	31.9	42.9
Probably occurred	2.0	7.4	2.6
Possibly occurred	28.6	22.3	16.9
Did not occur	51.0	38.3	37.7
Total	100.0	100.0	100.0

5.3.9 Descriptive statistics of the self-reported midlife crisis experience by gender groups

The gender analysis is reported in Table 5.7 below. The differences with regard to the experience of midlife crisis between males and females are not significant apart from a 6 percent higher number of males experiencing midlife crisis than women. If the number of individuals who probably experienced a midlife crisis is added to the number who did experience it, then the difference between males and females is only 4 percent.

TABLE 5.7 Frequency of occurrence of midlife crisis by gender

	Male	Female
Occurred	35.7	29.5
Probably occurred	3.5	5.7
Possibly occurred	20.0	23.8
Did not occur	40.9	41.0
Total	100.0	100.0

The validity of the above data can only be tested once the quantitative data in the MTQ has been analysed and a comparison is made between the two sets of data. This is dealt with under research question 7 below.

Question 4: Is there a methodologically sounder way of measuring whether a midlife crisis is being, or has been, experienced?

The current researcher submits that the quantitative survey data obtained from the research participants' responses to the MTQ would be a sound measure of whether a midlife crisis has occurred if:

(i) the MTQ meets the criteria of a sound instrument as per the SPSS; and
(ii) the results obtained demonstrate validity according to the conceptual model as in Chapter 3 (See Figure 3.1).

The methodological soundness of the MTQ is dealt with in section 5.3.10 below and the validity of the conceptual model of midlife transition is dealt with in research question 6 below.

5.3.10 Methodological soundness of the MTQ

The researcher started with 70 questions in the MTQ (Section 2 of the survey) measuring four possible aspects of midlife transition. These aspects were derived from the output of the researcher's pilot study (after variable reduction),

Oles' (1999) Midlife Crisis Questionnaire (MCQ) and other issues mentioned in the discussion of the literature (including the popular literature). The four aspects were as follows:

- **Physical transition issues**. Do physiological changes during the transition years have an effect on the psyche as popularly believed?
- **Conflicted issues.** Are there issues where a person experiences internal conflicts brought about possibly by interiority or the emergence of ego states or sub-personalities?
- **'Worry' issues.** Are there issues which cause significant (possibly dysfunctional) anxiety for the individuals?
- **Transition issues** from the literature, this researcher's pilot study and Oles' (1999) MCQ results.

All 70 questions in section two of the survey were analysed with principal component analysis, but the above four splits did not emerge separately as components from the analysis. It was accordingly decided that all 70 variables would be analysed together.

The combined data was analysed with principal component analysis split across the three age cohorts, the two gender cohorts and across the whole group of 220 participants without any splits.

The principal component analysis of the three age cohorts using all 70 variables revealed inadequate KMO coefficients for adults under 40 years of age (the values were under 0.5). For those between 40 and 50 years of age the KMO was 0.62 and for those individuals over 50 years of age it was under 0.6. Perusal of the data scores revealed a number of variables with low factor loadings (less than 0.3). According to Field (2009, p. 655) if "sampling adequacy is low, then a variable reduction process should be followed after which the principal component analysis process should be repeated".

5.3.10.1 Variable reduction process for the MTQ

The variable reduction process followed the recommendations of Field (2009) namely:

- Perform a principal component analysis on all data.
- Inspect the scree plot, and using Cattell's test (as cited in Field, 2009) determine how many factors to retain. According to Field (2009, p. 639) the cut-off point for the retention of factors is "just above the point of inflexion in the scree plot".
- Use eigenvalues over 1 (Keiser cited in Field, 2009).
- Examine communalities and eliminate those with trivial communalities (Field, 2009).
- Study the component, pattern and structural matrices and examine the variables associated with the components to see whether they approximate factors found in theory elsewhere.

As stated earlier (See Section 5.2.3) it was decided to retain two components. Variables with loadings lower than 0.4 on the pattern matrix and with communalities less than 0.35 across all three age cohorts were removed. Table 5.7 below contains the retained variables. Variables loading on component 1 are listed as 1 in Table 5.7 and those loading on component 2 are listed with the number 2 in Table 5.7.

TABLE 5.8 Variable reduction process

	MTQ Variables	<40	40-50	>50
1	Feel fatigued/depressed			
2	Dissatisfied with body			
3	Body deteriorating			
4	Signs of aging			
5	Urgent need for fitness			
6	Concerns unable to develop previous body			
7	Do I want to do current job?	1	1	1
8	Am I in the right job?	1	1	1
9	Am I in the right relationship?			
10	Am I physically attractive?			
11	Importance of attractiveness.			
12	Concern for others' opinion			
13	Can I delay aging process?	1	1	1
14	Boring life?			
15	Desire to delay aging?			
16	Will I achieve self-set goals?	1	1	
17	Good as it gets?			
18	Know own core values?			
19	Core values right?	2	2	2
20	Depressed about dying	2	2	2
21	Parent died –new feelings?	2	2	2
22	Own death closer	2	2	2
23	Death inevitable	2	2	2
24	Positive memories of adolescence?			
25	Authority figures remind me of teen years			
26	Younger generation sees as old	2	2	2
27	Period of dissatisfaction with job	1	1	1
28	Conflict at work over values	1	1	1
29	Advancement disappointment	1	1	1

30	Life behind me			
31	Missed opportunities	1	1	1
32	Advancing requires sacrifices			
33	More success than failures			
34	Compromising values to advance	1	1	1
35	Family will benefit from advancement			
36	Compromising values for material gain	1		1
37	Live to leave meaning behind			
38	Wonder how to prepare for death			
39	Difficult to live according to values			
40	Core values shaken?			
41	Work meaningless for a while?	1	1	1
42	No time to achieve ambitions	1	1	1
43	Stage of health problems at work?			
44	Must change, don't know what	1	1	1
45	Satisfied with achieved ambitions			
46	Difficult choices in competing values			
47	Guilt for compromising values			
48	I waste time on trivial activities	1	1	1
49	Anxious since first half done			
50	My youth is gone			
51	Blocked at work	1	1	1
52	Anxiety as time goes by	1	1	2
53	Too many person obstacles	1	1	1
54	Work achievements matched ambitions			
55	Problem cannot satisfy all needs	1	1	1
56	Cannot define main goal	1	1	1

57	Life values compromised in past			
58	Unfair, couldn't reach potential	1	1	1
59	Position threatened by younger	1	1	1
60	Afraid of disease	2	2	
61	Much to offer others			
62	Increasingly nervous			
63	Peers doing better	1	1	1
64	More depressed as aging			
65	Anxious about age			
66	Unknown anxiety	1	1	1
67	Afraid because not as fit/efficient			
68	Depression in mid-career	1	1	1
69	Many illusions people disappoint			
70	Period of difficulty solving work problems	1	1	1

The variable reduction process resulted in 32 variables being retained which were then subjected to principal component analysis across the three age cohorts, the two genders and the whole group. Before using principal component analysis for further analysis, the adequacy test for the whole group, the two gender cohorts and the three age cohorts of the reduced variables was repeated. The correlation matrix revealed many coefficients higher than 0.3, the communality values were almost all above 0.4 for some of the splits and the KMO values for age group 40-50 and 50+ were "excellent" (both over 0.8) Field (2009). The KMO for age group less than 40 years fell well inside the "adequate" range at 0.61 (Keiser cited in Pallant, 2004). The Bartlett test of sphericity achieved statistical significance in all cases supporting the factorability of the correlation matrix (Pallant, 2004).

5.3.10.2 Sampling adequacy results after the reduction process (Tables 5.9 to 5.14)

TABLE 5.9 KMO and Bartlett's Test all participants N = 220

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.902
Bartlett's Test of Sphericity	Approx. Chi-Square	3576.451
	df	496
	Sig.	.000

TABLE 5.10 KMO and Bartlett's Test Age group < 40 N=49

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.601
Bartlett's Test of Sphericity	Approx. Chi-Square	1089.443
	df	496
	Sig.	.000

TABLE 5.11 KMO & Bartlett's Test Age 40 and 50 N = 94

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.818
Bartlett's Test of Sphericity	Approx. Chi-Square	1676.297
	df	496
	Sig.	.000

TABLE 5.12 KMO and Bartlett's Test Aged > 50 N=76

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.848
Bartlett's Test of Sphericity	Approx. Chi-Square	1622.479
	df	496
	Sig.	.000

TABLE 5.13 KMO and Bartlett's Test for males N=115

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.868
Bartlett's Test of Sphericity	Approx. Chi-Square	2195.315
	df	496
	Sig.	.000

TABLE 5.14 KMO and Bartlett's Test for females 105

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.818
Bartlett's Test of Sphericity	Approx. Chi-Square	1800.829
	df	496
	Sig.	.000

5.3.11 Principal component analysis of the reduced 32 Variables in the MTQ

The principal component analysis of the entire research participant group is not included here as the main objective is to compare the two genders and the three age cohorts. The data for the whole group is found in Appendix 3.

Principal component analysis of the three age cohorts reveals nine components with eigenvalues above 1 and which explains over 70 percent of the variance. Principal component analysis for the two gender groups revealed seven and eight components respectively with eigenvalues above 1 and which explained 67 percent of the variance. However Field's (2009) suggestion that merely using eigenvalues of at least 1 as suggested by Keiser (cited in Field, 2009) as an acceptable eigenvalue tended to overstate the importance of some components and that the scree plot needed to be checked as well. Perusal of the scree plots in the three age cohorts and the two gender cohorts showed clear breaks after the second and third component. On the above basis and also having regard to the literature on the subject it was decided to extract two factors in all cases. The two factor pattern matrices for the three age cohorts and the two gender cohorts are below (Tables 5.15 to 5.19). The scree plots, communalities, total variance explained and structure matrices for all the age and gender cohorts are included in appendix 3 for reference purposes.

TABLE 5.15 Pattern Matrix Age < 40 N= 53

	Component	
	1	2
7 Want to do job	.696	
8 Right Job	.701	
13 Delay the aging Process	.557	

16 Achievement of Self-set Goals	.649	
19 Core Values right		.836
20 Depressed about dying		.689
21 Parent died		.621
22 Own death closer		.804
23 Death inevitable		.571
26 younger gen sees as old		.673
27 Period of dissatisfaction	.780	
28 values conflict at work	.546	
29 Advancement disappointment	.655	
31 Missed opportunities	.656	
34 Compromising values to advance	.542	
36 Compromising values for material gain	.468	
41 Work meaningless	.639	
42 No time for ambitions	.576	
44 Must change, don't know what	.607	
48 I waste time on trivial	.533	
51 Blocked at work	.784	
52 Anxiety as time goes by	.568	
53 Too many person obstacles	.734	
55 Problem cannot satisfy all needs	.495	
56 Cannot define main goal	.494	
58 Unfair, couldn't reach potential	.744	
59 Position threatened by younger	.569	
60 Afraid of disease		.518
63 Peers doing better	.565	
66Unknown anxiety	.645	
68 Depression in mid-career	.726	
70 Period of difficulty solving work problems	.649	

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.
a. Age groups = <40
b. Rotation converged in 5 iterations.

TABLE 5.16 Pattern Matrix Age 40-50 N=96

	Component	
	1	2
44 Must change, don't know what	.773	
51 Blocked at work	.744	
41 Work meaningless	.732	
27 Period of dissatisfaction	.722	
13 Delay the aging process	.712	
7 Want to do job	.701	
8 Right job	.691	
16 Achievement of self-set goals	.687	
63 Peers doing better	.626	
66 Unknown anxiety	.604	
48 I waste time on the trivial	.593	
55 Problem cannot satisfy all needs	.591	
42 No time for ambitions	.578	
68 Depression in mid-career	.567	
29 Advancement disappointment	.559	
31 Missed opportunities	.558	
53 Too many person obstacles	.544	
70 Period of difficulty solving work problems	.516	
58 Unfair, couldn't reach potential	.494	
56 Cannot define main goal	.478	
52 Anxiety as time goes by	.470	.443
28 Values conflict at work	.443	
59 Position threatened by younger	.410	
34 Compromising values to advance		
19 Core values right		.799
22 Own death closer		.794
20 Depressed about dying		.726
23 Death inevitable		.721
60 Afraid of disease		.584
26 Younger gen sees as old		.438
21 Parent died		

36 Compromising values for material gain		

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a,b]
a. Age groups = 40-50
b. Rotation converged in 7 iterations.

TABLE 5.17 Pattern Matrix age > 50 N=71

	Component	
	1	2
53 Too many person obstacles	.810	
58 Unfair, couldn't reach potential	.795	
51 Blocked at work	.776	
28 Values conflict at work	.764	
27 Period of dissatisfaction	.754	
41 Work meaningless	.737	
29 Advancement disappointment	.737	
66 Unknown anxiety	.730	
31 Missed opportunities	.727	
55 Problem cannot satisfy all needs	.694	
48 I waste time on the trivial	.672	
34 Compromising values to advance	.651	
8 Right job	.638	
63 Peers doing better	.616	
13 Delay the aging process	.615	
7 Want to do job	.596	
70 Period of difficulty solving work problems	.582	
68 Depression in mid-career	.581	
56 Cannot define main goal	.565	
42 No time for ambitions	.541	
36 Compromising values for material gain	.520	
59 Position threatened by younger	.513	
44 Must change, don't know what	.403	
19 Core values right		.870
23 Death inevitable		.833
22 Own death closer		.786
20 Depressed about dying		.765

26 younger gen sees as old		.672
52 Anxiety as time goes by		.603
21 Parent died		.600
60 Afraid of disease		.533
16 Achievement of self-set goals		

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a,b]
a. Age groups = 50>
b. Rotation converged in 5 iterations

TABLE 5.18 Pattern Matrix Males N=115

	Component	
	1	2
51 Blocked at work	.822	
27 Period of dissatisfaction	.796	
53 Too many person obstacles	.752	
29 Advancement disappointment	.704	
8 Right job	.698	
58 Unfair, couldn't reach potential	.692	
41 Work meaningless	.685	
7 Want to do job	.683	
13 Delay the aging process	.670	
55 Problem cannot satisfy all needs	.651	
31 Missed opportunities	.648	
66Unknown anxiety	.644	
63 Peers doing better	.621	
16 Achievement of self-set goals	.612	
70 Period of difficulty solving work problems	.605	
28 values conflict at work	.601	
44 Must change, don't know what	.573	
68 Depression in mid-career	.559	
48 I waste time on trivial	.531	
42 No time for ambitions	.510	
56 Cannot define main goal	.505	
34 Compromising values to advance	.486	

36 Compromising values for material gain		
19 Core values right		.810
22 Own death closer		.761
20 Depressed about dying		.760
23 Death inevitable		.726
26 Younger gen sees as old		.661
60 Afraid of disease		.635
52 Anxiety as time goes by		.581
21 Parent died		
59 Position threatened by younger		

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a,b]
a. Gender = Male
b. Rotation converged in 6 iterations.

TABLE 5.19 Pattern Matrix Females N=105

	Component	
	1	2
27 Period of dissatisfaction	.750	
51 Blocked at work	.728	
41 Work meaningless	.715	
8 Right job	.694	
44 Must change, don't know what	.676	
66 Unknown anxiety	.657	
7 Want to do job	.655	
48 I waste time on the trivial	.632	
58 Unfair, couldn't reach potential	.630	
53 Too many person obstacles	.629	
29 Advancement disappointment	.627	
42 No time for ambitions	.621	
31 Missed opportunities	.619	
13 Delay the aging Process	.616	
68 Depression in mid-career	.603	
55 Problem cannot satisfy all needs	.572	
28 values conflict at work	.568	
63 Peers doing better	.563	
59 Position threatened by younger	.552	
52 Anxiety as time goes by	.543	

34 Compromising values to advance	.536	
16 Achievement of self-set goals	.486	
70 Period of difficulty solving work problems	.484	
56 Cannot define main goal	.452	
36 Compromising values for material gain		
22 Own death closer		.906
19 Core values right		.827
23 Death inevitable		.802
20 Depressed about dying		.754
21 Parent died		.636
26 Younger gen sees as old		.500
60 Afraid of disease		.412

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a,b]
a. Gender = Female
b. Rotation converged in 4 iterations.

As can be seen from the pattern matrices in Tables 5.15 to 5.19, with hardly any exceptions, the same variables loaded on factor 1 and factor 2 for all the age and gender cohort splits. Therefore, the two components are provisionally named as follows:

Component 1: Stagnation or immobility. The word has been chosen as all the variables which load onto this factor suggest a position of inability to move on. This is in line with the conceptual model of midlife transition where the words ‘stuckness’ and ‘momentum’ are used to describe the movement processes involved in midlife. Moreover, this is also the word chosen by Erikson (1950) as the opposite of generativity. Erikson (1950, p. 267) submitted that failure at generativity leads to an obsessive need for “pseudo-intimacy often with a sense of stagnation”.

Component 2: Death-aging concerns. The wording of the variables loaded on this component use death and aging concerns.

It should be noted that the two factors stagnation and death-aging concerns are the same as the midlife crisis themes found in the self-reported analysis as discussed in Section 5.3.2 above.

5.3.12 MTQ component scores

Obtaining component scores from the SPSS for the two components of stagnation and death-aging concern was done by means of the Anderson Rubin Method. This method computes individual component scores for the two components and was chosen for this purpose as the method produces standardised uncorrelated scores thus "avoiding the problems of multi-collinearity" (Field, 2009, p. 638). The arithmetic mean of the sample scores using the Anderson Rubin Method is 0 and the standard deviation is 1. This signifies that if an individual scores for example a - 3 on stagnation it is regarded as a high score and is likely to indicate a midlife crisis. A normal distribution with a mean of 0 and a standard deviation of 1 provides a seven point scale from -3 to +3. Although there are higher and lower scores than -3 and +3 these are referred to as outliers in the SPSS (Field, 2009; Pallant, 2004) and are eliminated by the SPSS when performing Multiple Regression Analysis (MRA).

The seven-point normal distribution scale was converted to a four-point scale for the purposes of comparing the scores using the same scale as the quantified self-reported definitions and experience of midlife crisis. To err on the side of caution, scores of -1.50 and lower (- 3.0) were coded as 1 (definitely occurred), scores from -1.5 to -0.5 were coded as 2 (probably occurred), scores lower than -0.5 was coded as a 3 or 4 (possibly occurred or did not occur) and treated as if the midlife crisis did not occur. The individual scores on the two factors were examined and the frequencies are as per Table 5.20 below:

TABLE 5.20 Descriptive statistics – percentage frequency distribution - two midlife crisis principal components found in the MTQ analysis

	Stagnation %	**Death- aging %**	**Total at least 1 component %**
Definite -1.5 to 3	8	9	15
Probable -1.49 to - 0.5	20	20	31
Possible -0.49 to 1.49	67	69	50
Didn't occur 1.5 to 3	5	2	4

Under the third column headed "Total at least 1 component %" there were 32 cases out of 220 research respondents who scored between -1.5 and –3. This represents 15 percent of the total sample. The inference is that although almost 33 percent of the respondents (See Tables 5.4 to 5.6) indicated a definite 'yes' to the self-reported question regarding midlife crisis in Section 5.2 of the survey, the more methodologically sound MTQ results reveal that more than half of this number (15%) actually experienced a midlife crisis. This is similar, although a bit higher than Brim's (1992) findings that only 10 percent of people experience a midlife crisis. However, when the figure for those participants in the MTQ study who **probably** experienced a midlife crisis (scores from -0.5 to -1.49) is added to the **definite** category the percentage experiencing a crisis increases to 46 percent. This is significantly higher than the total of definite and probable data from the self-reported results (37% in Table 5.2).

It can be concluded from the above results that two valid components have emerged from the analysis of the MTQ which can be classed as a methodologically sound way of measuring the occurrence of midlife crisis in South Africa.

Exploration of the validity of some important aspects of the conceptual model of midlife transition and crisis is covered in Question 7 below by utilizing MRA. The exploration is done by using the component scores obtained from

the (i) biographical data; (ii) the Big Five data; and (iii) the ways of coping data as independent variables and the two components of (iv) stagnation and (v) death-aging concerns are analysed separately as dependent variables (See section 5.3.16 below). If significant multiple regression coefficients are established it is submitted that this will demonstrate the validity of some important aspects of the conceptual model of midlife transition.

Question 5. What is an operational definition of a midlife crisis?

Given that the current research study includes the quest for a "search of the midlife crisis" it is necessary to define the concept midlife crisis operationally by also taking into account the findings of the analysis of the self-reported experience of midlife crisis as well as that of the MTQ output.

According to Colman (2009) an operational definition in the field of psychology is the expression of a notion in terms of the operations or procedures by which it may be observed. Grinnel (2009, p. 1) takes this a step further by stating that an operational definition "[i]dentifies one or more specific, observable events or conditions such that any other researcher can independently measure and/or test for them".

The midlife crisis operational definition in the current research study could be determined either qualitatively and/or quantitatively. As criticism has been lodged (Brim, 1992; Wethington, 2000) of the ability of individuals to accurately define a midlife crisis and also to have a tendency to overstate the experience, both qualitative as well as quantitative aspects were investigated in this current research study. The output from the analysis of the self-reported definition and experience of midlife crisis as well as the output from the principal component analysis of the MTQ data were used in constructing an operational definition of midlife crisis which is proposed as follows:

A midlife crisis could be determined by an individual's measured, observed or self-reported functioning in personal, work and/or family domains as being in a high state of stagnation or immobility and/or including high anxiety over death and/or aging concerns.

Question 6. Is the MTQ a valid measure of the quantitative variables contained in the operational definition of a midlife crisis?

This is **the core question to be answered in the current research study**. The answer lies in an examination of the conceptual model of midlife transition and crisis to establish whether the two components of stagnation and death/aging concern, are influenced to a significant degree by the three proposed moderating aspects of biographical data, the three Big Five personality factors and the ways of coping scores. It is also necessary to examine the data for the three age cohorts and the two gender cohorts to answer this question adequately.

The three moderating aspects were first subjected to PCA (See sections 5.3.13 - 5.3.15 below) including the reduction process of Field (2009) where necessary. This enabled component scores to be derived from the SPSS using the Anderson-Rubin Method for the three moderating aspects so that the MRA could then be carried out. The component scores derived from the SPSS for the three aspects were then used as independent variables and the component scores of stagnation and death/aging concerns used separately as the dependent variable. The analysis is covered in the next section.

5.3.13 Principal Component Analysis of biographical data

As per Section 4.7.3.1 in Chapter 4, the biographical data were collected around three thematic areas, namely, childhood and adolescent history, residential (including family) history, and employment history. Within these themes, data

on relationships with friends and family were also gathered as were attitudes towards religion during childhood and adulthood. The sections in the survey were as follows:

- Geographical details.
- Childhood and adolescent experience including – parenting, siblings, socialisation, schooling and further education, religion and family relationships.
- Non-family relationships.
- Life satisfaction.
- Employment including job level, industry, and employment changes during midlife transition period, job satisfaction.
- Personal relationships including marital status
- Health issues.
- Achievements including academic, sporting, workplace, community, societal, leadership and office-bearership.

Principal component analysis was carried out on all biographical data. Variables with factor loadings under 0.4 and communalities below 0.35 across all age and gender splits were removed, thereby reducing the variables from 45 to 32. Principal component analysis was repeated on the total sample using the reduced variables and also splitting the research data by age and gender cohorts. Sampling adequacy for the groups was acceptable for the sample as a whole but somewhat lower for the three age groups (KMOs above 0.5 in all cases). However, the data could not be split by age and gender in combination, as the sub-set samples had inadequate KMO values (all well below 0.5 except for females between 40 and 50 years. In any event, the factors for females aged between 40 and 50 were no different than for females of all ages). The split between age and gender in combination was therefore abandoned.

Six factors for the age and gender split groups emerged which are provisionally named as:

- Religiosity;
- parental closeness;
- work stability;
- geographical origin;
- adult relationship stability; and
- childhood stability.

The variance explained by the principal component analysis of the various groups was highly significant (See Table 5.21 below). The KMO coefficients are also included to demonstrate sampling adequacy). Individual component scores on the six components is duly captured.

TABLE 5.21 Variance explained and KMO values

Group	Per cent variance explained	KMO value
All participants	66.8	0.62
Younger than 40	72.9	0.53
40 - 50	69.2	0.56
Older than 50	68.6	0.55
Males	67.8	0.59
Females	68.7	0.61

5.3.14 Principal component analysis of three of the Big Five personality factors

Three of the Big Five factors namely neuroticism, extraversion and openness were measured in the comprehensive research survey across three domains: at work, in the family and in relationships.

The 54 questions using a ten-point scale were included in random order which ensured that individuals would not simply give the same answer across domains.

After a principal component analysis was conducted six factors emerged. Field's (2009) variable reduction process was conducted which reduced the variables from 54 to 51.

TABLE 5.22 Variance explained and KMO values by age and gender splits

Factors	% Variance explained	KMO value
< 40	54	<0.5
40 - 50	54	0.61
>50	54	0.56
Males	54	0.66
Females	47	0.56
All participants	53	0.72

5.3.14.1 Age cohort analysis

Principal component analysis across the three age cohorts revealed that the KMO coefficients were inadequate for those research participants under 40 years of age with a just adequate value for the research participants aged over 50 years.

A comparison of arithmetic means across the age groups (See Table 5.23 below) was thus conducted which revealed few significant differences. The symbols S, I and C stand for emotional stability, introversion and down-to-earthness respectively.

These findings would seem to confirm McCrae and Costa's (2003) theory that personality traits do not change across age cohorts or during midlife transition. Further exploration in this regard across age cohorts alone was accordingly abandoned.

TABLE 5.23 Three of the Big 5 factor facets across age groups

	< 40 Mean	40 - 50 Mean	> 50 Mean
1311 S	6.78	6.97	6.91
4312 S	7.51	7.53	7.83
7331 S	7.24	7.46	7.96
10241 S	7.57	7.49	8.43
13351 S	6.86	6.59	6.88
16361 S	7.67	7.44	8.23
19371 I	6.31	6.07	5.95
22381 I	6.31	6.44	5.69
25391 I	6.73	6.62	6.45
283101 I	7.71	8.02	7.90
313111 I	6.20	5.91	6.22
343121 I	7.08	7.47	6.77
373131 C	5.76	5.73	6.21
303141 C	3.88	4.34	3.96
433151 C	4.65	4.65	4.19
453161 C	4.59	3.98	4.10
483171 C	3.67	3.51	3.08
513181 C	5.00	5.00	4.47

5.3.14.2 Gender analysis

Principal component analysis was conducted across the two gender cohorts and the three domains of work, family and relationships. This analysis revealed adequate KMO coefficients for males and females. Both the male and female groups showed six factors present with the first three factors almost exactly the same for both gender groups, namely neuroticism in the family and relationship domains, practicality in all three domains, and introversion in all three domains.

Only factors four to six showed some differences between males and females.

Males

Factor 4: Stability and Introversion combined in family and relationship domains.

Factor 5: Stability at work.

Factor 6: Practicality at work and in relationships.

Females

Factor 4: Introversion at work.

Factor 5: Practicality at work.

Factor 6: A combination of all three personality factors in the family domain.

Owing to the similarities between ages and genders (apart from the gender differences in Factors 4 to 6), it was decided to perform a PCA of the big three factors across the three domains, namely at work, in the family, and in relationships to see whether there were differences in age groups or gender within these environments.

The analysis of the three domains separately across the age and gender groups revealed that there are no significant differences between the age and gender cohorts. This further demonstrates the stability of personality traits across ages, genders and domains as posited by McCrae and Costa (2003). However, the descriptive statistics across the three domains showed significantly less extraversion (4 out of 6 facets highlighted below) at work than in the family and relationships (See Table 5.24 below).

TABLE 5.24 Descriptive statistics - means across domains

Variable	MEAN Work	MEAN Family	MEAN Relationships	N =
2312 Stability	6.90	7.10	7.31	220
5322 Stability	7.63	7.03	7.49	220
8332 Stability	7.59	7.68	7.57	220
11342 Stability	7.84	8.67	8.12	220
14352 Stability	6.75	5.20	5.39	220
17362 Stability	7.77	7.045	6.61	220
20372 Introversion	6.08	3.73	3.90	220
23382 Introversion	6.15	7.21	7.19	220
26392 Introversion	6.59	7.04	7.11	220
293102 Introversion	7.91	7.91	7.69	220
323112 Introversion	6.09	7.39	7.49	220
353122 Introversion	7.14	8.25	8.03	220
373131 Down-to-earth	5.90	5.90	6.24	220
413142 Down-to-earth	4.10	4.29	4.29	220
463162 Close	4.49		4.63	220
493172 Down-to-earth	4.16	5.47	4.83	220
523182 Close	3.40	3.18	3.01	220
	4.81	4.82	4.70	220

The questions related to personality at work were subjected to a PCA and three of the Big Five components clearly emerged (see Table 5.25)

TABLE 5.25 Work pattern matrix

Variables	Component		
	Introversion	Neuroticism	Practicality
25391 I	.732		
22381 I	.710		
313111 I	.706		
343121 I	.627		
19371 I	-.522		
283101 I	.501		
373131 P	.467		
1311 S		.730	
4312 S		.687	
16361 S		.677	
13351 S		.673	
7331 S		.648	
10241 S		.623	
433151 P			.781
303141 P			.736
483171 P			.629
453161 P			.604
513181 P			.540

5.3.15 Principal Component Analysis of Ways of Coping Questionnaire

The WCQ is a critical component of the conceptual model of midlife transition proposed in Chapters 3 and 4 of this thesis as it is hypothesised that the way chosen to cope with the triggered stress will moderate the experience of midlife crisis.

After a PCA was conducted on the responses to the WCQ, six factors emerged. Using Field's (2009) criteria a variable reduction process similar to that done with the MTQ variables was conducted which reduced the variables from 49 to 31. A PCA on the reduced variables for the whole group as well as by age and gender cohorts was then carried out. The variables associated with Folkman and Lazarus' (1984) eight factors were coded into this researcher's data base to determine whether the same factors emerged in this research study as were found by Folkman and Lazarus (1984).

The findings are that four of the Folkman and Lazarus factors emerged strongly for all research participants (See Appendix 6). These factors were as follows

- positivity;
- wishful thinking;
- seeking social support; and
- detachment.

A further two of Folkman and Lazarus' (1984) factors were also apparent but were weaker, namely, confrontive coping and problem solving. The rest of the factors and where no clear factor(s) emerged are labelled as 'mixed'. The results split by age groups and gender is presented below in Table 5.26. Component 1 is the component which is responsible for the most variance with Component 2 the second most variance and so on. This means that for participants younger than 40 years of age, wishful thinking is the way of coping with the highest loading and problem solving is the component with the second highest loading.

TABLE 5.26 Principal Component Analysis of components by age and gender

Components	1	2	3	4	5	6	% variance explained	KMO Values
< 40	Wishful thinking	Problem solving	Seeking social support	Detach-ment	Mixed	Mixed	60	0.56
40 - 50	Positivity	Wishful thinking	Detach-ment	Con-frontive coping	Mixed	Mixed	53	0.66
>50	Seeking social support	Wishful thinking	Positive problem solving	Mixed	Mixed	Mixed	55	0.66
Males	Positivity / problem solving	Wishful thinking	Seeking social support	Detachment	Mixed	Mixed	53	0.73
Females	Positivity	Wishful thinking	Seeking social support	Problem solving	Con-frontive coping	Mixed	52	0.71
All	Positivity	Wishful thinking	Seeking social support	Detach-ment	Con-frontive coping	-	51	0.79

Wishful thinking and staying positive. These are the two components (1 and 2) that are strongly found in all the groups except in the over 50 years-of-age group whose primary way of coping is to **seek social support**. What is also noteworthy is that the group in transition (between 40 and 50) seem not to use problem solving as a mechanism at all for coping with midlife stress. It is submitted that this may be a guideline for providing therapy or coaching which focuses on problem solving (such as cognitive behavioural therapy or coaching) for individuals experiencing a midlife crisis.

5.3.16 Validating the conceptual model and the MTQ using multiple regression analysis

Multiple regression analysis is the predominant tool for examining the association or predictive value of a set of variables (independent variables) with a particular outcome (dependent variable). According to Field (2009)

multiple regression analysis is a logical extension of simple linear regression where there are several predictors. The multiple regression is the multiple correlation coefficient between, on the one hand, the outcome (dependent) variable (for example experience of midlife crisis) and on the other, the predictor (independent) variables (for example biographical data scores and/or MTQ scores) (Field, 2009). Pallant (2004) describes multiple regression analysis as reporting how much of the variance in the outcome variable is explained by the predictor variables and also provides an indication of the extent to which each predictor variable influences the outcome variable.

The SPSS contains a number of different methods of doing multiple regression analysis. The main methods available are:

- Standard or simultaneous multiple regression where all predictors are inserted into the equation simultaneously.
- Hierarchical or sequential multiple regression where the predictor variables are inserted into the equation in whatever order the researcher decides.
- Stepwise multiple regression where a list of predictors is supplied and SPSS decides which variables to enter. Field (2009) asserts that this method should only be used for exploratory model building as it tends to over fit or under fit variables and can thus be inaccurate.

A multiple regression analysis was carried out using the two MTQ components individually as the dependent variable and three aspects namely biographical data, three of the Big Five personality factors, and the WCQ data as the independent variables. This part of the analysis was done using the hierarchical or sequential MRA method with each of the two MTQ component scores as the dependent variables. The biographical data is inserted first followed by the big three data and finally the WCQ data. The complete results of this analysis are to be found in Appendix 7. The table below (Table 5.27) contains the multiple regression coefficients for this analysis.

TABLE 5.27 Hierarchical MRA Comparison–Regression coefficients with both MTQ components individually shown as dependent variables

Split	Dependent Variable STAGNATION	Dependent Variable DEATH ANXIETY
Male	0.679	0.612
Female	0.587	0.592
Age <40	0.815	0.672
Age 40-50	0.641	0.617
Age > 50	0.649	0.751
All participants	0.576	0.525

Both MTQ components have significant regression coefficients that are close to or higher than 0.6, across all age and gender splits. Gender and age themselves also influence the midlife period in that the analyses of age and gender groups reveal higher coefficients in all cases than when all participants as a whole were analysed with multiple regression analysis.

The component of stagnation is the strongest component with all coefficients well over 0.6 except for females at 0.587. This would seem to validate the model insofar as the **significant influence** of biographical details, three of the Big Five personality factors and the ways of coping are concerned.

It is submitted that the MTQ is a methodologically sound measure and is also considerably more accurate than a self-expressed assessment of midlife crisis. This is clear from the statistics included in Table 5.27 above.

Question 7. How does the quantified self-reported experience of midlife crisis compare to the MTQ components as a predictor of midlife crisis?

Multiple regression analysis was performed using the quantified scores on the self-reported experience of midlife crisis as the dependent variable and the two

components of stagnation and death/aging concern as the independent variables.

The results of this hierarchical MRA (See Table 5.28 below) reveal that there is no significant correlation between the self-described experience of a midlife crisis and the two components of the MTQ namely stagnation and death/aging concerns except for males and the over 50 years of age cohort. [Although correlations from 0.4 to 0.7, as per Guildford (cited in Tredoux & Durrheim 2002) are regarded as moderate but significant, for this current researcher's study, only correlations of 0.5 and above are considered as significant]. The correlation for the transition group (aged between 40 and 50 years) was low. This could be related to the finding discussed in Section 5.2.1 where the transition group compared to the other two age groups had the lowest percentage citing stagnation and death-aging concerns in their definitions. Interiority was the predominant theme (41%) for the transition group and could well be the most important factor in the transition period. The detailed "model summaries" of midlife transition of the respective age and gender cohorts are found in Appendix 7

TABLE 5.28 Hierarchical multiple regression analysis coefficients: self-reported experience of midlife crisis and MTQ components

Splits	Stagnation (S)	S + Death (D)
< 40	0.307	0.311
40 - 50	0.336	0.343
> 50	0.589	0.599
Males	0.487	0.506
Females	0.318	0.348

A multiple regression analysis was conducted using component scores from the biographical data, the Big Five and the WCQ data as independent (predictor) variables (see Table 5.29) and the self-reported experience of

midlife crisis as dependent variable. This analysis reveals that there are only significant regression coefficients (greater than 0.5) for respondents under 40 and over 50 years of age. Refer to Appendix 8 for the full model summary information for the multiple regression analysis data of the self-expressed experience of a midlife crisis (MLC).

TABLE 5.29 Multiple regression analysis

	Midlife Crisis
<40	0.618
40-50	0.428
>50	0.531
Males	0.486
females	0.472

A comparison between the MRA using the MTQ component scores and the self-reported experience of midlife crisis score is shown below (Table 5.30). Data of the three aspects of biographical data, the Big Five and the WCQ were used as independent variables in both cases.

TABLE 5.30 Hierarchical MRA Comparison MTQ and MLC

SPLIT	Dependent Variable STAG	Dependent Variable DEATH	Dependent variable MLC EX table 5.2.9.4
Male	0.679	0.612	0.486
Female	0.587	0.592	0.472
Age <40	0.815	0.672	0.618
Age 40-50	0.641	0.617	0.428
Age > 50	0.649	0.751	0.531

All participants	0.576	0.525	

Three inferences can be drawn from the data in Tables 5.28 to 5.30:

- Firstly, the MTQ components as methodologically sound measures of midlife crisis are significantly more accurate than the self-expressed experience of midlife crisis.
- Secondly, the view that individuals do not accurately describe a midlife crisis seems to be confirmed except for individuals over 50 years of age and, to a lesser extent, males.
- Thirdly, the number of people who think they have experienced a midlife crisis seems to be substantially overstated. Using the MTQ as a valid and methodologically sound instrument result in findings that are probably closer to reality at 15 percent rather than 33 percent.

Question 8. How does the quantitative research output of the current research study compare with the work done by Oles (1999) and his associates?

A comparative analysis was carried out with the findings of Oles (1999) since his midlife crisis questionnaire (MCQ) containing 76 items was used in the original pilot study by this researcher (referred to in Section 4.6.1). The pilot study contained all 76 items from the MCQ plus an additional 56 items constructed by the current researcher - a total of 132 items. The pilot study found that 44 of the 132 items loaded on three factors of which 21 came from the MCQ. These 44 items were included as transition items (Section 2, paragraph 4 of the comprehensive survey – see Appendix 1). An additional 26 questions focusing on physical, conflicted and worrying issues were added to

deal with further relevant aspects found in the literature as well as possible unconscious issues such as ego states.

The reduction process mentioned in Section 5.3.10.1 above resulted in the reduction of the 70 variables to 32 of which 22 were related to transition issues (See Table 5.8 above). Only seven of the 32 items are from the MCQ which makes a direct comparison spurious.

A thematic comparison between the components reveals that Oles (1999) found three factors which he provisionally named:

(i) intensity of midlife crisis;
(ii) psychological maturity scale; and
(iii) acceptance of fate and death.

The current researcher found a factor which is named, 'concern with death and aging' which seems to be similar to 'acceptance of fate and death'.

A perusal of the items in the Psychological Maturity Scale of the MCQ reveals items that are also closely aligned to the concept of Generativity (Erikson, 1950). Although this researcher included a number of items related to generativity surprisingly the concept of generativity did not emerge from the PCA of the MTQ in the current research study.

The reason for Oles' (1999) provisional naming of the main factor in the MCQ as **intensity of midlife crisis (**although not immediately apparent from a perusal of the items he found that loaded on this factor) would seem to indicate that the score will determine whether or not a crisis has occurred, or whether it is nearer the edge of the continuum from no midlife crisis to a highly intense midlife crisis.

Compared to Oles' (1999) study, the current researcher included a greater number of 'work and 'values' related items (16 out of 72) in the final survey which could account for the differences in some findings as well.

Question 9. Does midlife transition and possibly midlife crisis occur later than previously thought, due to increased longevity?

It must be acknowledged that the 'timing of inevitable event' theory as posited by Lachman (2001) makes eminent sense. However, the practical difficulties of having regard to this factor were expounded in the answer to the research question 1 (See Section 5.3 above). Accordingly the age range 40 to 50 years of age as the midlife transition period that has been used for the last 30 years since the work of Tamir (1982) and McAdams (1993) had to suffice for this current research study.

An examination of when a midlife crisis occurred, whether self-reported or as measured by the MTQ, was undertaken. There were significant differences in the self-reported definition and self-reported experience of midlife crisis between the transition group and the groups younger than 40 and older than 50 years (See Tables 5.2 and 5.5 above).

Almost 43 percent of research respondents over the age of 50 years thought they did have a midlife crisis as opposed to 32 percent of the transition group and only 18 percent of the research participants below the age of 40 years. This would indicate that a midlife crisis as defined and experienced by the respondents themselves does occur significantly more often in individuals over the age of 50 than in the transition period (between 40 and 50 years) and under 40 years of age. Furthermore, in defining a midlife crisis, people over the age of 50 years include death and aging concerns in their definition almost twice as often as those research participants in the transition period, and

nearly four times as much as the research participants under the age of 40 years.

Using the MTQ components (See Table 5.31 below) there seems to be no significant difference between the three age groups in the definitely occurred category. When the probably occurred percentage frequency is added to the definitely occurred frequency then death/aging concerns are significantly higher for the transition group and even higher amongst the over 50 years of age group.

TABLE 5.31 Percentage frequency of stagnation and death-aging concern in sample

	< 40			40-50			>50		
	MTQ Stag*	MTQ Death#	MLC	MTQ Stag	MTQ Death	MLC	MTQ Stag	MTQ Death	MLC
Occurred	6.1	10.2	18.4	8.5	8.5	31.9	9.1	7.8	42.9
Probably occurred	26.5	10.2	2	20.2	21.2	7.5	15.6	25.9	2.6
Possibly occurred	61.2	77.6	28.6	66	70.2	22.3	71.4	61	16.9
Did not occur	6.1	2	51	5.3	1	38.3	3.9	3.9	37.7

*Stag = stagnation. # Death = death and aging anxiety

Question 10. Is there a variation in the experience of the midlife crisis from moderate to severe?

The MTQ clearly shows a variation in the experience of stagnation and death/aging concerns (See Table 5.31). The percentage of individuals who

definitely experienced a crisis in all age groups and genders was between six and ten percent. Some 85 percent of the research sample fell in the middle two categories of probably and possibly with 60 to 70 percent having a very mild experience and six percent not having any midlife crisis experience at all. The distribution of scores using the MTQ from 'definitely occurred' to 'definitely did not occur' is normal whilst the distribution of scores on self-reported data is bimodal at the extremities and is not normal. The result from the self-reported experience of midlife crisis indicate that individuals seemed to be quite emphatic about this in answering 'yes' or 'no'. The fact that over 90 percent of respondents were able to define a midlife crisis but between 38 and 51 percent said that they did not have a crisis, would indicate that they understood the concept socially but had not had the experience of a midlife crisis.

Two possible inferences can be drawn from these findings:

- Firstly, the MTQ data in Table 5.31 replicates again the non-validity of the theory of a normative almost pathological occurrence of a midlife crisis occurring for most people. Brim (1992) seems to be correct that only ten percent of people have a midlife crisis and this may, in any event, be due to the theory of 'inevitable life events in midlife'.
- Secondly, the MTQ frequency of those individuals who fell into the 'probably occurred' category was much higher than the 'definitely occurred' category. What is also interesting is that the percentage of respondents who scored on 'probably occurred' in the self-reported experience was very low (2% to 7.5%) compared to that of the MTQ (15% to 25% for stagnation and 10% -25% for death). The inference is that this is probably due to overstating that will take place when a person makes a self-judgment as to whether they experience a midlife crisis or not.

Question 11. Does the MTQ analysis reveal any particular personality characteristics, biographical factors and/or ways of coping that are related to the components of stagnation and death/aging concerns?

Hierarchical multiple regression analysis was carried out using the three personality components, the six biographical components and the six ways of coping components. The findings were that 'neuroticism' was the most significant personality factor for all age and gender groups (See Table 5.32)

The multiple regression coefficients are provided below in the highlighted rows. The component with the highest percentage contribution towards the regression coefficient is in the row below this. For example, the regression coefficient for 'stagnation' as the dependent variable, and the big three components as the independent variables for is 0.639 for individuals younger than 40 and 'neuroticism' contributes 83 percent towards this coefficient. Introversion and down to earthness seem to account for the remaining 17 percent.

What this means is that neurotic individuals would be more likely to experience a midlife crisis in the form of stagnation and death anxiety. Wishful thinking as a prime mode of dealing with a triggering event would more likely lead to a midlife crisis and those individuals with strong religious beliefs would be less likely to experience stagnation, while individuals with strong parental influence would also be less likely to experience death or aging anxiety.

TABLE 5.32 Two component MRA coefficients and percentage contribution of one factor

	< 40	40-50	>50	Male	Female
Stag Big 3	0.639	0.530	0.424	0.519	0.498
Neuroticism	83%	96%	86%	94%	98%
Death Big 3	0.279	0.523	0.567	0.512	0.167
Neuroticism	-	89%	97%	97%	-
Stag WCQ	0.418	0.583	0.442	0.549	0.417
Wishful thinking	71%	94%	85%	82%	86%
Death WCQ	0.589	0.458	0.555	0.451	0.265
Wishful thinking	positiv ity				
	56%	97%	57%	92%	66%
Stag biodata	0.271	0.295	0.359	0.325	0.328
Religiosity	65%	84%	67%	74%	32%
Death biodata	0.409	0.462	0.382	0.280	0.460
Parental influence	51%	82%	45%	71%	77%

Stag = stagnation. WCQ = ways of coping questionnaire scores

The model summaries for all age and gender groups for all components can be found in Appendix 10.

5.4 SUMMARY

The PCA was used to analyse the midlife transition questionnaire, the biographical data, three of the Big Five personality factors as well as the ways of coping factors which enabled the following components to be extracted:

- Two midlife transition components provisionally named stagnation - immobility and death/aging concerns were established and can be used to measure the extent to which a person will experience a midlife crisis or as Oles (1999) put it, the intensity of a midlife crisis.
- Six biographical components, namely: religiosity, parental closeness, work stability, geographical origin, adult relationship stability and childhood stability were also extracted.
- Three of the Big Five personality factors were extracted namely neuroticism, extraversion and openness.
- Four components of the WCQ were extracted namely positivity, wishful thinking, detachment, and seeking social support. Component combining positivity and problem solving was found in the males cohort.

Multiple regression analysis using the six component scores of the biographical data, the three Big Five personality factors and the five ways of coping components all as independent variables and the 'stagnation.' and 'death/aging' concerns each separately as the dependent variable, revealed significant regression coefficients (See Table 5.32). Further in-depth analysis revealed that in most cases one particular component from each of the three aspects contributed a substantially high portion of the regression coefficient (See Table 5.32). Neuroticism, wishful thinking and religiosity/parental influence contributed over 80 percent to the scores on stagnation and death/aging concerns.

The current researcher was also able to replicate the research findings by Wethington (2000) in regard to the number of self-reported definitions and experiences of midlife crisis. A similar percentage of people in South Africa, as in the USA, believed they had experienced a midlife crisis. However, a comparison between the self-reported experience and the more methodologically

sound MTQ revealed that the frequency of self-reported midlife crisis was significantly overstated as was found by Brim (1992).

The quantitative data was not able to reveal anything of depth about the experience of stagnation and death/aging concerns.

CHAPTER 6

CONCLUSIONS

6.1 INTRODUCTION

As stated in Chapter 1 midlife (approximate ages 40 to 65) is usually the time when the combination of, inter alia, work and life-related knowledge, experience, skill, maturity, physical and mental fitness as well as the motivation of individuals should be at its optimal level. It is, therefore, not coincidental that key roles in organisations are usually occupied by people in midlife and it is thus very important that the organisational environment and climate be properly geared for such people to be willing, able and allowed to perform optimally for their own and the organisation's continued productivity, efficiency and effectiveness (Lachman, 2001).

A paradoxical situation of so-called structural unemployment exists in South Africa where on the one hand, there is an overabundance of individuals at the unskilled and semi-skilled levels and on the other, a shortage of individuals at the skilled levels. Furthermore, owing to historical educational deficits among many unskilled and semi-skilled individuals, the skills gap cannot be rapidly levelled by upskilling the unskilled and semi-skilled individuals. This situation is particularly so in the management structures in South Africa and the country can therefore ill afford the phenomenon of midlife crisis exacerbating the problem even further. At the same time, when people are between the ages of 40 to 65, it is also the time period when inevitably certain stressful life events and fears and/or anxieties about growing older (trigger events) start occurring.

It has been averred by some theorists (Clausen, 1998; McAdams, 1993; Wethington, 2000) that workplace turning points are the most important aspects experienced in the midlife transition period, and consequently they have the highest possibility of triggering a midlife crisis. Owing to the emphasis of the workplace domain, it was expected that workplace crisis or mid-career crisis would be a much researched area. This is however not the case and in fact very few research articles

in this domain were found in the literature search by the current researcher. Furthermore, the principal component analysis of the MTQ issues in the comprehensive survey in this research project did not reveal a unique work-related component with only work-related variables loading on that component. However, 12 out of 24 variables loading on the component stagnation or immobility from the principal component analysis of the MTQ did contain work-related variables. The other 12 variables loaded on the stagnation component related to aspects of the self or the individual. 30 percent of those individuals who indicated that they had **experienced** a self-reported midlife crisis also mentioned workplace issues as the triggering feature of their midlife crisis. The issue of workplace crisis was, however, not mentioned by any participant in the self-reported **definitions** of midlife crisis. Interiority was the most important domain in the self-reported **definitions** of midlife crisis (42%) and the self-reported **experience** of a midlife crisis (44%). The frequency distribution of those emphasising work as an important component of midlife crisis in the self-reported experience of midlife crisis (30.5%) was lower than those who defined the self-reported experience as comprising personal interiority issues (43%). It should be mentioned that the domain of family does not feature specifically as a major contributor to possible midlife crisis in either the self-reported midlife crisis data or the MTQ data.

The conclusions that can be drawn from the above results are that midlife work issues and personal issues, as they relate to possible midlife crisis, are not mutually exclusive. Work problems at midlife that cause a crisis situation seem to be part of a wider life crisis.

6.2 AIMS OF THE RESEARCH STUDY

The overall aim of this current research study is to explore the experience of midlife transition in South Africa and contemporaneously to investigate whether the popularly believed phenomenon of the so-called midlife crisis exists in South Africa and, if so, to what extent. Facilitation of this exploratory process was enabled by the development of a conceptual model of midlife transition and crisis in South Africa (See Figure 3.1). Input to this model was derived from the literature

study and information gleaned for the current researcher's pilot study and from participating focus groups in South Africa.

A further aim of this research study is to explore and, if possible, formulate an **operational definition** of midlife crisis in South Africa. This was researched both quantitatively and qualitatively and the proposed definition is as follows:

A midlife crisis could be determined by an individual's measured, observed or self-reported functioning in the personal, work and/or family sphere as being in a high state of stagnation or immobility and/or a high state of anxiety over death and aging concerns.

This researcher was, moreover, able to replicate in South Africa, the work of others in the USA (Brim, 1992; Wethington, 2000) in regard to the self-described **definition** of midlife crisis by individual participants in this current research study. Similar to the USA, the vast majority of respondents (94%) were able to define a midlife crisis and do so accurately, which corresponds with the findings in the USA where 92% were able to define the phenomenon (Wethington 2000). When asked to self-report on this aspect, a minority of participants in this research study in South Africa (33%) said they had actually experienced such a crisis. This is similar, although a bit higher than Wethington's (2000) finding in the USA of 26 percent. This nevertheless confirms the findings that the midlife crisis is not normative that is, it is not experienced by all people.

6.2.1 Self-reported definition of midlife crisis

The text analysis of the self-reported definitions of midlife crisis by the 220 participants in this research study revealed three clear themes, namely:

(i) Stagnation/immobility;
(ii) Death and/or ageing anxiety; and
(iii) Internal thinking (or 'interiority' as named by Neugarten, 1968).

The first two themes in the self-reported definition are identical to the two components established by principle component analysis of the MTQ data in the current research study, which would seem to confirm their validity. However, very few of the self-reported definitions of midlife crisis provided all three themes together in their narrative with most participants providing just one theme.

It can be concluded from these findings that a midlife crisis experience could consist of one or more of the three themes or components but that when individuals are asked to define it, they will do so from their own individual perspective, usually across only one domain which is probably the most important issue for them. In-depth interviews may well reveal more than one domain (or even a ranked order of domains by their importance) for the individuals. However, for the reasons of parsimony mentioned earlier, interviews did not form part of this current research study.

6.2.2 Interiority

The theme of interiority is an important construct in the midlife transition period (Clausen 1998; McAdams 1993; Neugarten 1968c). This was demonstrated in the current research study where interiority was submitted as a theme in the self-reported definitions of midlife crisis by 44 percent of the survey participants. 43 percent who self-reported that they definitely or probably experienced a midlife crisis, also described it in the domain of interiority (see Sections 5.3.1, 5.3.2 & 5.3.5). Twelve out of 24 variables that loaded on the component of stagnation or immobility from the MTQ are deemed to be interiority issues.

The conclusion that can be inferred from this is that interiority is a key issue in midlife. Furthermore, interiority and work-related issues tend to combine

and interact with one another in relation to midlife crisis if, or when, it occurs for some. It is also likely that interiority issues will impact on work-related issues and vice versa in midlife.

6.2.3 Self-reported experience of midlife crisis

A further conclusion that has been reached by this research study is that the findings in the USA (Wethington, 2000) that individuals are able to define the concept of midlife crisis quite accurately, but they significantly overstate the intensity of their own experience seems to be common phenomenon as the same was found in this current research study. This finding was established by comparing the self-reported experience of midlife crisis to the more methodologically sound method of measuring midlife crisis where this measuring tool (the MTQ) revealed a much lower incidence of midlife crisis (15%) than the self-reported incidence (33%). This latter finding also replicates Brim's (1992) finding that while 26 percent of research participants' self-reported a midlife crisis only 10 percent truly had such a midlife crisis.

It is important to mention, however, that there is a variation in the scores of stagnation and death/aging anxiety as measured by the MTQ and that the category of **'probably** occurred' when added to the category '**definitely** occurred' reveals much higher percentage occurrences (28.7% and 29.7% for stagnation and death/aging anxiety respectively for the age cohort 40-50 years). The percentages for the over 50 years of age cohort are 24.7 percent and 33.7 percent for stagnation and death/aging anxiety respectively. These scores are closer to the self-reported experience of midlife crisis (32.9%).

It can, therefore, be concluded that some individuals who self-report a midlife crisis may be reporting genuine discomfort rather than crisis per se. Furthermore, there are significant differences between the transition cohort

and the over 50 cohort in that stagnation is more of an issue for those in the transition group while death/aging anxiety is more important for those in the over-50 cohort.

6.3 A CONCEPTUAL MODEL OF MIDLIFE TRANSITION AND CRISIS IN SOUTH AFRICA

Where this current research study differs from many other studies on a similar topic is its acknowledgement of the complexity of the concept of midlife transition and crisis, as well as the inclusion and comparison between age and gender cohorts. One age cohort was made up of participants older than 50 years and another included individuals that were younger than 40 years. Similarly to Tamir's (1982) research study, these cohort scores were compared to the midlife transition cohort (aged between 40 and 50 years). However, unlike Tamir's research, where only men were studied, in this current research study both genders were included. Furthermore, a social psychological paradigmatic approach was followed as suggested for the study of the life course by Giele and Elder (1998b). To this end, the conceptual model of midlife transition and crisis included, a combination of as many structural (contextual/social) and personal factors as possible that may have been relevant as indicated in the literature study.

Eleven research questions were derived from the conceptual framework model of midlife transition and crisis and were addressed in this current research study. An additional key aim of this current research study was the use of the SPSS to analyse the data from 220 research participants to evaluate and validate certain aspects of the proposed conceptual model of midlife transition and crisis in South Africa. This was considered a methodologically sound method of exploring the midlife transition period and the incidence of midlife crisis in South Africa. Not all aspects of the conceptual model of midlife transition and crisis could, however, be researched due to the constraints mentioned in Sections 3.1 and 3.2 and this will be elaborated upon in section 6.5 below.

6.4 CONCLUSIONS

6.4.1 Age cohorts

Although the timing of inevitable events would probably have been a superior method of determining the midlife transition and midlife crisis periods (Clausen, 1998; Lachman, 2001) the nature of this current research study did not permit this due to the limitations mentioned in Section 5.2. Nevertheless, using the age period 40 to 50 years was found to be more than adequate as per the findings in Section 5.2 where the lower cut-off point of 40 years of age was validated.

When studying midlife transition and/or crisis, the midlife individuals studied should be split into two distinct age periods – those in early or younger midlife (40-50) and those in late or older midlife (50-65). Individuals older than 50 years in South Africa tend to have a higher incidence of self-reported and scientifically measured midlife crisis (by means of the MTQ) than those in the younger midlife transition group (aged between 40 to 50 years). This is in line with current thinking (Lachman, 2001; McAdams, 1993; McCrae & Costa, 2003; Rosenberg et al. 1999) that later midlife is probably a time of greater turbulence than early midlife.

6.4.2 Gender cohorts

No significant gender differences in the current research study were found between males and females in the self-reported definition and experience of midlife crisis in that both gender cohorts identified the same factors (see Sections 5.3.7 and 5.3.9). The gender analysis of the MTQ also revealed two components with the same variables loading for both gender cohorts (See tables 5.18 and 5.19). The gender analysis of three of the Big Five personality factors of neuroticism, introversion and openness to experience confirmed that personality traits across genders were stable (McCrae & Costa, 2003). Gender analysis of the ways of coping also revealed that positivity, wishful

thinking and seeking social support were used by both genders as the three primary ways of coping in the same order of priority.

Unfortunately the research sample for the current research study was not large enough to be able to study gender cohort differences within the three age cohorts.

6.4.3 Neuroticism

Insofar as the component of **stagnation** in midlife is concerned (see Table 5.3.2) it must be mentioned that the presence of a neurotic personality trait will significantly increase the possibility of a midlife crisis for males and females as well as the transition group (40 to 50 years of age) and the over 50 years of age midlife cohort. Higher stagnation scores are thus found with those participants high on the neuroticism scale.

A significant correlation between neuroticism and stagnation was also found for the cohort under 40 years of age, which leads to the probable conclusion, similar to that of McCrae and Costa (2003), that those people with neurotic personalities are more likely to have a crisis at any age. It also supports Jung's (1933) remarks about neurotic people being more likely to experience problems in midlife.

When it comes to the correlation between neuroticism and the component of **death and ageing anxiety,** however, the regression coefficient for those younger than 40 years and for females is insignificant. For participants between 40 to 50 years, those older than 50 years and males the regression coefficients are significant (all above 0.5) and the variance accountabilities of neuroticism in this regard are 89 percent, 97 percent and 97 percent respectively. The inference of the latter data is that individuals high in the neurotic personality traits are more likely to find late midlife even more stressful than early midlife and, with this caveat, this assertion is similar to

those of some other researchers (Lachman, 2001; McAdams, 1993; Rosenberg et al., 1999).

6.4.4 Religion and relationships with parents

Researchers (Jung, 1933; Ryff, Singer & Palmersheim 2004) emphasised the importance of religion in enabling individuals to come to terms with advancing age and preparing for death. This was not established as a valid component of the model of midlife transition in South Africa in this current research study. The component, **religiosity**, while being the one with the highest factor loading of all biographical factors, did not exhibit any significant correlation with the midlife crisis component of stagnation or death/ageing anxiety, although it did contribute 84 percent towards the variance explained for stagnation.

Positive relationships with parents is found to be significantly correlated with the component of death/ageing anxiety for the midlife transition cohort Here the regression coefficient for the midlife transition cohort was highest and accounted for significantly more variance than the other two age cohorts - 82 percent as opposed to 51 percent and 45 percent respectively. Good relationships with parents seems therefore important to minimise the possibility of midlife crisis for those in the midlife transition period.

6.4.5 Personality traits

McCrae and Costa (2003) expressed concern at the assertion made particularly by earlier researchers (Levinson et al., 1978; Neugarten, 1968c) that personality changes in the midlife transition period. The stability of three of the Big Five personality traits namely; neuroticism, extraversion and openness to experience, was also investigated in this current research study. The finding is that the three personality traits seem indeed to be stable across all age and gender cohorts which supports the assertions of McCrae and Costa.

6.4.6 Ways of coping

The ways in which individuals cope as a moderator of the midlife crisis components of stagnation and death/ageing anxiety was also investigated in the current research study. Data analysis revealed that **wishful thinking** was the coping mechanism which correlated most significantly with both of the midlife crisis components of stagnation and death/ageing anxiety. Furthermore, where wishful thinking was correlated with stagnation the regression coefficient for the midlife transition cohort of 40 to 50 years is highest of all cohorts at 0.6, while the coefficients for those younger than 40 and older than 50 are lower – as both are closer to 0.4.

The conclusion that can be drawn from these findings is that the use of wishful thinking as a coping mechanism by those individuals in the midlife transition period will lead to a more intense experience of stagnation and death/ageing anxiety. Such individuals seeking therapy or coaching could be assessed to establish what coping mechanism is being used and if necessary helped to try another coping strategy such as planned problem solving.

6.5 LIMITATIONS OF THE LITERATURE REVIEW

Apart from the work of McCrae and Costa (2003) and Tamir (2002) there are few **quantitative** research findings or literature into midlife transition and/or crisis except for some descriptive research, such as that done by Wethington (2000).

There also seems to be little peer-reviewed literature or research on the psychodynamic and unconscious aspects of midlife transition and crisis. This is unfortunate given the significance of interiority as a factor, although the difficulty of gathering accurate data in this regard is recognised as a major challenge. There is a paucity of psychological research or literature on socio-psychological combination models of midlife transition and crisis whereby multiple factors are quantitatively researched. These limitations necessitated the construction of a

conceptual model of midlife transition and crisis but not all aspects of this model could be investigated.

6.6 LIMITATIONS OF THE PRACTICAL STUDY AND EXECUTION THEREOF

It was originally planned to analyse the data from the comprehensive survey to establish whether the midlife crisis construct emerged. If it did, it was planned to select 10 people from the total number of respondents (n = 220) who experienced the highest degree of midlife crisis and 10 who experienced the lowest level and then to determine whether there were any significant differences between these two groups. The 20 people from the two groups would be interviewed on a one-on-one basis to establish their life stories using narrative techniques (Clausen, 1998; McAdams, 1993). The purpose of this aspect of the inquiry would have been to investigate the subjective meaning of their experience (McAdams, 1993; Rosenberg et al., 1999). Ericksonian and ego state techniques (Geary & Zeig, 2001; Watkins & Watkins, 1997) were to be used contemporaneously with the establishment of life stories (Clausen, 1998) to delve into some of the more complex factors such as the presence of disruptive ego states. Regrettably, this part of the study could not be undertaken as extensive time for interviewing the 20 people on numerous occasions would have been necessary to extract meaningful data, aside from the likely difficulty in motivating the participants to do so. It is salient to mention that the considerable time mentioned for the interviewing process above is, according to Clausen (1998), necessary as meaningful data can only be gathered with comprehensive and repeated interviews to obtain this information. Issues such as (i) major life events; (ii) commitments made and roles taken up; (iii) the core of the individual's sense of identity; and (iv) the equivocation that all these aspects create, make for considerable complexity.

6.7 RECOMMENDATIONS

Certain key aspects of a conceptual model of midlife transition and crisis (See Figure 3.1) have been scientifically validated in this current research study, which, it is submitted, can be used by therapists and coaches with their midlife clients to determine whether the clients are experiencing midlife transition difficulties or a crisis.

The MTQ has been established in this research study as a methodologically sound instrument for measuring the level of intensity that middle-aged individuals experience feelings of stagnation or death/ageing anxiety and can accordingly be used for assessment of individuals who are experiencing such symptoms. At the same time, the capture of certain data included in the model such as biographical data, as well as the use of the WCQ and the Big Five questionnaires can assist in establishing the possible cause of the symptoms, which should, in turn, facilitate therapy or coaching interventions. The following example is provided below to demonstrate how the above recommendation could possibly work in practice.

Example

A client aged 42 presents with feelings of anxiety, the cause of which is unknown to the client. At the same time the client expresses disappointment with himself and feels that he is stuck in a rut and not going anywhere in life. The therapist or coach then uses the model by gathering information regarding triggers, such as turning points, social clock data, life events and work issues that may have occurred in the individual's life. If these have occurred and seem to be relevant then biographical data is gathered and the client is given the MTQ, the WCQ and the Big Five questionnaire to complete. The report on all the data (as per Appendix 10) is fed back to the client using the model to facilitate understanding by the client of what is going on in his life and why. Depending on how the individual is coping with the anxiety, a suitable therapeutic or coaching strategy can be proposed and

implemented. For example, if the client uses wishful thinking as a means of coping, a problem- solving approach can be proposed as an alternative.

There is little doubt that the issues of midlife transition and midlife crisis are more complex than may be realised by many. The bulk of the analysis carried out in the current research study was quantitative and as stated above, considerable breadth was achieved, but regrettably, sufficient depth of analysis was not possible. It is recommended that future research focuses on several one-on-one well planned in-depth interviews to get to know the client well and to clarify certain issues as elucidated in Section 6.6. Below are some issues that are recommended for future qualitative research:

- What are the differences between those who have acute as opposed to chronic midlife crises?
- Is there a particular process in which a midlife crisis can be handled successfully?
- Do particular ego states or imagos emerge in midlife? If so, what is the nature and impact on the midlife transition?
- Is brief development therapy or coaching possible, with the aim of preventing a full-blown midlife crisis. If so, what are the features of such therapy?
- Is it possible to prevent a midlife crisis becoming chronic for those people who may be predisposed by, for example, undergoing specialised development therapy or coaching?
- To what extent does the concept of identity impact on individuals in midlife transition?

The 20th Century mythologist and philosopher Joseph Campbell (cited in Morgan, 2012) seems to sum up the sentiment experienced by the current researcher at the end of this research study: *"Gods' suppressed become devils, and often it is these devils whom we first encounter when we turn inward."*

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APPENDIX 1

Comprehensive Survey Version 1.2a

SECTION 1 – ABOUT YOURSELF

1 Personal Details

1.1) Email address: (field)

1.2) Cell phone number: (field)

1.3) Age: Drop down menus to include each year from 35 to 60+

1.4) Gender (Select: Male or female)

2 Geographical Details

2.1) What province were you born in? Drop down list of provinces including an option for outside RSA.

2.2) Which province do you live in now? Drop down provinces.

2.3) Did you live in any other provinces apart from the birth promise and present province? Yes/no and if yes, when and for how long? Tick boxes years and number of years.

2.4) Where were you born? - City, Town or rural area (farm)?

3 Upbringing child hood and adolescence

3.1) Parents

Mother and father alive or deceased?

3.2) Siblings

(a) Your birth order
(b) How many siblings?
(c) Gender of siblings?

3.3) Socialisation

(a) Happiness during childhood? 1. Fond memories. 2. Some challenges. 3 Many challenges. 4. Unhappy
(b) Friendships during childhood? 1. Many friends. 2. A few good friends 3. One good friend. 4. No friends

3.4) Schooling and education.

(a) Where did you go to school? 1. In City 2. In Town 3. In rural village/farm
(b) For how long? 1. Primary school/s number of years. 2. High school/s number of years
(c) How many schools did you attend? 1. Primary schools number? 2. High school number?
d) Highest standard achieved? From std 5- std 10
(e) Tertiary education? Tech or University attended and qualification obtained 1. Did not complete.2. Obtained Degree or diploma. 3. Obtained Post grad qual
(f) Sport if any played at school or after school. Team sports or individual sports?
(g) Any leadership roles at school of university - technikon?

3.5) Religion

(a) Parents attitudes to religious matters. 1. Practicing believers. 2. Non practicing believers 3. Agnostic. 4. Non-Believers.

(b) Your attitude during youth and young adulthood. 1. Practicing believer. 2 Non practicing believer. 3. Agnostic. 4. Non Believer.
(c) Present belief including doubts. 1. Practicing believer 2.Non practicing believer. 2. 3. Agnostic. 4. Non Believer.
(d) Devotion for believers and agnostics. 1. Attend main festivals. 2. Attend most Sundays.3. Seldom attend 4. Don't attend

3.6) Current family relationships

(a) With Parents (face to face visits emails or skype)? 1. In contact very often. 2. In contact occasionally 3. Seldom contact. 4. No contact.

(b) With Siblings (face to face visits, emails or skype)? 1. In contact very often. 2. In contact occasionally 3. Seldom contact. 4. No contact.

4. Non Family relationships

4.1) Adult Friendships

How many friends? 1. Many friends. 2. A few good friends 3. 1 good friend. 4. No friends

4.2) Other relationships

Non work (tick boxes- one or more). Community, church, competitive sport, non competitive sport, society, games, crafts

5. Employment

5.1) Job level at present

(a) Unskilled Worker e.g. - Job can be learned in up to one week and requires basic literacy skills e.g. cleaner or labourer.
(b) Semi skilled worker e.g. - Job that can be learned in up to one month and requires some skill e.g. - code 8 vehicle driver
(c) Skilled worker e.g. extra heavy duty truck driver, Planner
(d) Artisan - Electrician, Mechanic
(e) Supervisor
(f) First line manager,
(g) Middle management,
(h)Top management
(i) Executive director
(j) Professional
(k) Owner smme

5.2) What industry/ies have you worked in?

- Chemical/petrochemical
- Mining
- Financial;
- Transport
- Manufacturing
- Agricultural
- Profession (lawyer, Accountant etc)
- Building and construction

5.3) Did you change your employment during age 35 to present.

(a) Yes or no
(b) If yes how many times
(c) What age/s were you at when you changed jobs? - Age for each change from first to fifth change of job

What was the reason for changing jobs (tick one or more?)
(a) To change careers,
(b) Felt stale
(c) Could not fulfil goals
(d) No progress
(e) Not enough money
(f) Not enough challenge
(g) Blocked at work
(h) Retrenched
(i) Retired
(j) Other

5.4) Current job satisfaction?

(a) Work stressors? 1. Excessive workload. 2. Bullying bosses. 3. Irregular hours. 4 unrealistic deadlines. 5. Poor working relationships. 6. Poor performance. 7. Existence of continuous workplace conflict.8. no stressors
(b) Any People at work who remind you of a parent? Yes or no – what is it about them that reminds you of parents. Fill in space.

6. Personal Relationships

Marital Status

- Unmarried no current significant relationship (Single)
- In a relationship – not yet long term
- In a Long term relationship with a partner
- Married – if so – how long?
- How many times married or been in a long term relationship?
- Age at separation or divorce?

7. Health

Yes or no and age it occurred

- Operations – Minor such as tonsils, appendix and major – specify
- Serious illnesses – specify and age they occurred?
- Depression – and anxiety? Age it occurred. Are you still suffering from anxiety or depression?
- Bad cuts/bleeding or injuries and timing of these?
- Seriously painful injury e.g. broken arm or serious illness and age these occurred?
- Dentistry – pain and fear – injections.
- Do you suffer from any Chronic condition – if so specify and when did it start?
- Near death illnesses or injuries and if so when did they occur
- Did you ever suffer from an ingestion of a poisonous substance?
- Did you ever suffer from a serious burn/s?
- Did you ever receive a serious Electrical shock?
- Size – height and muscular tone
- Fitness – what if anything do you do to keep fit?

8. Achievements

Please specify

- Academic achievements at primary school, high school and beyond - specify
- Sporting achievements at primary school, high school and beyond - specify
- Achievements in the workplace - specify
- Achievements in society - specify
- Leadership positions. specify

- Committee membership - specify
- Office bearership - specify

SECTION 2 – LIFE TRANSITION EXPERIENCES

Below are some statements which describe the way people sometimes think, sense or feel about the experience of getting older. They are known to start occurring, for some people, after the age of 30 but especially for people from age mid thirties or later. Please tick the appropriate box which best describes your own experience now, (regardless of your current age).

1. Physical

1.1) Feelings of fatigue, listlessness and depression.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

1.2) Feelings of dissatisfaction with your body shape size etc.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

1.3 Feeling that your body cannot function as well as it used to.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

1.4 The first signs of wear and tear on your body are being experienced.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

1.5 A need to get into shape physically

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

1.6 Wondering whether you could develop a body that you never had before.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

2. Conflicted Issues

Some people develop conflicted attitudes towards many issues that seemed to be clear to them earlier - did (or do) any of the following questions occur to you?

2.1 Do I really want to do what I am doing?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

2.2 Am I in the right job?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

2.3 Am I in the right relationship?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

2.4 Am I still physically attractive?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

2.5 Is it important to me to be attractive?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

2.6 Am I worried about how others view me?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

2.7 Can I delay the aging process?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

2.8 Has life become a bore?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

2.9 Do I want to delay the aging process if I could?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

2.10 Will I achieve my goals or dreams for myself?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

2.11 Is this as good as it gets?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

2.12 Do I know what my core values are?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

2.13 Are my core values the right ones for me?

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

3. Worry issues

Did any of the following thoughts or feelings worry you in the past after age 35 or even now?

3. Worrying Issues

Have any of the following thoughts or feelings been worrying you lately or worried you from your mid-thirties?

3.1 Time seem to be marching on.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

3.2 My best years may be behind me.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

3.3 Death and dying is a scary issue.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

3.4 I am depressed about death and dying.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

3.5 A parent or parental figure in my life died recently and has this led to new feelings not experienced before.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

3.6 My own death and the dying process suddenly feels as if it's getting closer to me.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

3.7 I have suddenly realised that my own death is inevitable.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

3.8 I have started having some memories of certain negative experiences from my adolescence which seem to still bug me.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

3.9 Some authority figures in my life make me remember my time as a teenager.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

3.10 I have suddenly become aware that there is a generation below me which sees me as old.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

4. Transition issues

Below you will find a list of statements reflecting different thoughts, feelings or experiences regarding life and its problems that you are having (or may have had) during your mid life (age 30 to 60).
Please read each of them carefully and consider whether or not they are occurring (or did occur). Indicate to what extent the feeling, thought or experience occurred (or is occurring) to you by clicking the appropriate box.

4.1 I experienced a long period of dissatisfaction with my job.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

4.2 I have had difficult conflicts at work between my values and what I was required to do by my company officials.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

4.3 I find it disappointing that I won't get much further at work.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.4 I often think which part of my life is already behind me.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.5 I have already missed a lot of opportunities in my life.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.6 Getting to the top requires great sacrifices that I am quite prepared to make.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.7 So far I have achieved more successes than I have experienced failures.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.8 I had conflicts between getting ahead at work and thereby compromising my values.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.9 By getting to the top at work my family will benefit even if it means that I am away from home a lot.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.10 I have had choices which I made which required significantly compromising values in exchange for material gain.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.11 I try to live in such a way so that I will leave something really meaningful behind me.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.12 Sometimes I wonder how to prepare myself for death.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.13 I have had occasion/s where I found it difficult to live according to my values and beliefs.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.14 Some of my core beliefs have been shaken to the extent that I think about it for a long time.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.15 I went through a stage where my work seemed to have less meaning.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.16 I know that I will not have the time to fulfill some important ambitions in my life.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.17 I went through a stage where all of a sudden I started having health problems at work.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

4.18 I feel that I should change something in my life, but I don't know what yet.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

4.19 I am satisfied with my ambitions that I have already realised.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

4.20 I have had experiences where it was difficult to choose between competing values e.g. independence and caring for my family.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

4.21 A have had occasion/s where I felt really guilty at doing something which I knew was significantly contrary to my values.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

4.22 I waste my energy and time on meaningless activities.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

4.23 I feel anxious that one half of my life is over.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.24 My youth is gone.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.25 I feel blocked at work but am not sure why.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.26 I feel anxious that time goes by.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.27 There are too many people that will prevent me from achieving my potential at work.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.28 My achievements at work matched my ambitions

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.29 The fact that I cannot satisfy all my needs has become a major problem for me.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.30 I cannot define the main goal of my life.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.31 Looking back on my life so far, I have a sense that my values have been seriously compromised.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.32 I often think about how unfair it was that I could not reach my potential at work.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.33 My professional position seems to be threatened by younger colleagues.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.34 I am afraid of diseases more and more.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.35 I have much to offer other people.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.36 I've become more and more nervous.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.37 1 came to a realisation that some of my peers were doing better at their careers than I was.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.38 I am depressed because I am getting older and older.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.39 I've started growing old and I feel anxious about it.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.40 I went through a stage of anxiety at work without knowing why this was happening

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.41 I am afraid that I am not as fit and efficient as I was before.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.42 I experienced a period of depression during mid career at work without knowing why it happened

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.43 I still have many illusions and other people continue to disappoint me.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

---

4.44 I went through a period where I found it difficult to solve work related problems.

❑ Strongly occurred ❑ Occurred ❑ Occurred to minor extent ❑ Did not occur

SECTION 3 – DOMINANT TEMPERAMENT

The following dimensions are often used to describe a person's dominant temperament. Please choose a number between 1 and 10 that best describes the way you operate at work, in the family and in personal relationships. Choose a number from the drop down menu for each dimension and put it into each of the boxes. Try to avoid choosing a middle path.

			work	Family	Personal relationships
3.1	Calm 10……..	1 worrying			
3.2	Even tempered10 ……..	1 temperamental			
3.3	Self satisfied10……	1 self-pitying			
3.4	Comfortable10……	1 self-conscious			
3.5	Unemotional10……	1 emotional			
3.6	Hardy10……	1 vulnerable			
3.7	Reserved 10……..	1 affectionate			
3.8	Loner1……..	10 Joiner			
3.9	Quiet 1……	10 Talkative			
3.10	Passive 1……..	10 Active			
3.11	Sober1……	10 Fun Loving			
3.12	Unfeeling1……..	10 Passionate			
3.13	Down to earth10……	1 imaginative			
3.14	Uncreative10……..	1 Creative			
3.15	Conventional10……..	1 Original			
3.16	Prefer Routine 10……	1 Prefer variety			
3.17	Disinterested10……..	1 curious			
3.18	Conservative10……..	1 liberal			

SECTION 4 - WAYS OF COPING

To respond to the specific statements in the questionnaire, you must have a specific stressful situation or period in your life in mind. Take a few moments and think about the 2 or three most stressful situations or periods that you have experienced in your life from age 30 until now.

By stressful is meant situations that were difficult or troubling for you either because you had to use considerable effort to deal with the situation or it took/is taking long to be resolved. The situation may have involved your family, your job, your friends, your significant other or something else important to you. Before responding to the statements, think about the details of the stressful situations, such as where they happened, who was involved, how you acted and why it was important to you. While you may still be involved in the situation, or it could already have happened, it should be the most stressful situations that you experienced during the period from age 30 until now.

As you respond to each of the statements, please keep this stressful situation in mind.
Read each statement carefully and indicate by choosing a 0, 1, 2 or 3 which indicates the extent you used it in the situation.

Key 0 = Does not apply or not used 1 = Used somewhat
2 = Used quite a bit 3 = Used a great deal

Please try to respond to each question.

4.1	Just concentrated on what I had to do next – the next step.	0 1 2 3
4.2	I did something which I didn't think would work, but at least I was doing something.	0 1 2 3
4.3	Tried to get the person responsible to change his or her mind.	0 1 2 3
4.4	Talked to someone to find out more about the situation.	0 1 2 3
4.5	Criticized or lectured myself.	0 1 2 3
4.6	Tried not to burn my bridges, but leave things open somewhat.	0 1 2 3
4.7	Hoped a miracle would happen.	0 1 2 3
4.8	Went along with fate; sometimes I just have bad luck.	0 1 2 3
4.9	Went on as if nothing had happened.	0 1 2 3
4.10	I tried to keep my feelings to myself.	0 1 2 3

4.11	Looked for the silver lining, so to speak; tried to look on the bright side of things.	0	1	2	3
4.12	Slept more than usual.	0	1	2	3
4.13	I expressed anger to the person(s) who caused the problem.	0	1	2	3
4.14	Accepted sympathy and understanding from someone.	0	1	2	3
4.15	I was inspired to do something creative.	0	1	2	3
4.16	Tried to forget the whole thing.	0	1	2	3
4.17	I got professional help.	0	1	2	3
4.18	Changed or grew as a person in a good way.	0	1	2	3
4.19	I apologized or did something to make up.	0	1	2	3
4.20	I made a plan of action and followed it.	0	1	2	3
4.21	I let my feelings out somehow.	0	1	2	3
4.22	Realized I brought the problem on myself.	0	1	2	3
4.23	I came out of the experience better than when I went in.	0	1	2	3
4.24	Talked to someone who could do something concrete about the problem.	0	1	2	3
4.25	Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.	0	1	2	3
4.26	Took a big chance or did something very risky.	0	1	2	3
4.27	I tried not to act too hastily or follow my first hunch.	0	1	2	3
4.28	Found new faith.	0	1	2	3
4.29	Rediscovered what is important in life.	0	1	2	3
4.30	Changed something so things would turn out all right.	0	1	2	3
4.31	Avoided being with people in general.	0	1	2	3
4.32	Didn’t let it get to me; refused to think too much about it.	0	1	2	3
4.33	I asked a relative or friend I respected for advice.	0	1	2	3

4.34	Kept others from knowing how bad things were.	0	1	2	3
4.35	Made light of the situation; refused to get too serious about it.	0	1	2	3
4.36	Talked to someone about how I was feeling.	0	1	2	3
4.37	Stood my ground and fought for what I wanted.	0	1	2	3
4.38	Took it out on other people.	0	1	2	3
4.39	Drew on my past experiences; I was in a similar situation before.	0	1	2	3
4.40	I knew what had to be done, so I doubled my efforts to make things work.	0	1	2	3
4.41	Refused to believe that it had happened.	0	1	2	3
4.42	I made a promise to myself that things would be different next time.	0	1	2	3
4.43	Came up with a couple of different solutions to the problem.	0	1	2	3
4.44	I tried to keep my feelings from interfering with other things too much.	0	1	2	3
4.45	I changed something about myself.	0	1	2	3
4.46	Wished that the situation would go away or somehow be over with.	0	1	2	3
4.47	Had fantasies or wishes about how things might turn out.	0	1	2	3
4.48	I prayed.	0	1	2	3
4.49	I thought about how a person I admire would handle this situation and used that as a model.	0	1	2	3
4.50	I tried to see things from the other person's point of view.	0	1	2	3

SECTION 5 - Final Questions

5.1 The term midlife crisis is well known and often used. How would you define it?

5.2 Did you / are you experience/(ing) a midlife crisis?

If you answered yes to question 5.2 what happened to you? (Provide full details of the experience).

APPENDIX 2

BIOGRAPHICAL DATA PRINCIPAL COMPONENT ANALYSIS

< 40

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.530
Bartlett's Test of Sphericity	Approx. Chi-Square	300.355
	df	120
	Sig.	.000

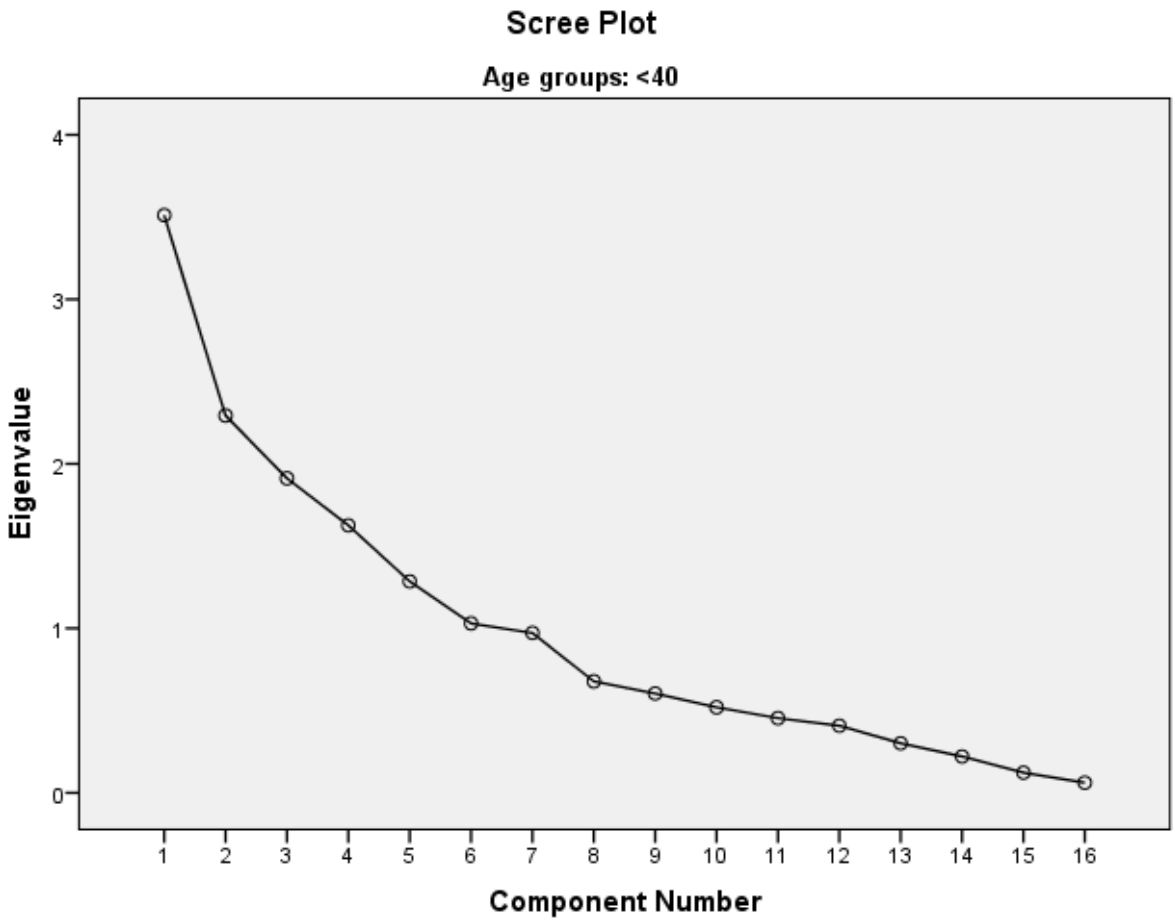
a. Age groups = <40

Communalities[a]

	Initial	Extraction
Area Born	1.000	.756
Parents Deceased	1.000	.794
Childhood happiness	1.000	.596
High Schools Attended	1.000	.680
Parents Attitude Toward Religion	1.000	.638
Attitude Toward Religion in Young Life	1.000	.722
Present Beliefs	1.000	.643
Devotion	1.000	.684
Primary Schools attended	1.000	.571
Contact With Parents	1.000	.899
School Area	1.000	.716
Employment Change 35-Present	1.000	.918
Number of Job Changes	1.000	.933
Years Married	1.000	.673
Times Married/LT Relationship	1.000	.706
Relationship Status	1.000	.731

Extraction Method: Principal Component Analysis.

a. Age groups = <40


Scree Plot
Age groups: <40
Eigenvalue
4
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16
Component Number

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	3.512	21.949	21.949	3.512	21.949	21.949	
2	2.293	14.333	36.282	2.293	14.333	36.282	
3	1.912	11.949	48.231	1.912	11.949	48.231	
4	1.626	10.164	58.396	1.626	10.164	58.396	
5	1.286	8.035	66.430	1.286	8.035	66.430	
6	1.030	6.438	72.868	1.030	6.438	72.868	
7	.972	6.075	78.943				
8	.678	4.235	83.178				
9	.604	3.772	86.949				
10	.520	3.248	90.198				
11	.454	2.837	93.035				
12	.408	2.550	95.585				
13	.301	1.882	97.466				
14	.221	1.381	98.847				
15	.123	.767	99.614				
16	.062	.386	100.000				

Extraction Method: Principal Component Analysis.

a. Age groups = <40

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
Area Born	-.874					
School Area	-.865					
Devotion	.547					
Present Beliefs	.515					
Years Married	-.427					-.354
Employment Change 35-Present		.958				
Number of Job Changes		-.934				
High Schools Attended			.836			
Primary Schools attended			.614			
Childhood happiness			.580		-.430	
Contact With Parents				-.942		
Parents Deceased				-.864		
Relationship Status					.848	
Attitude Toward Religion in Young Life					-.692	-.437
Times Married/LT Relationship						.783
Parents Attitude Toward Religion						-.544

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = <40

b. Rotation converged in 13 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
Area Born	-.815					
School Area	-.800					
Devotion	.688		.410		-.391	
Present Beliefs	.639		.410			
Years Married	-.578			-.396	.455	-.402
Employment Change 35-Present		.952				
Number of Job Changes		-.941				
High Schools Attended			.774			
Primary Schools attended			.644			
Childhood happiness			.628		-.513	
Contact With Parents				-.880		
Parents Deceased				-.874		
Relationship Status					.786	
Attitude Toward Religion in Young Life					-.719	-.419
Times Married/LT Relationship						.802
Parents Attitude Toward Religion			.446		-.374	-.549

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = <40

AGED 40 – 50

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.555
Bartlett's Test of Sphericity	Approx. Chi-Square	448.655
	df	120
	Sig.	.000

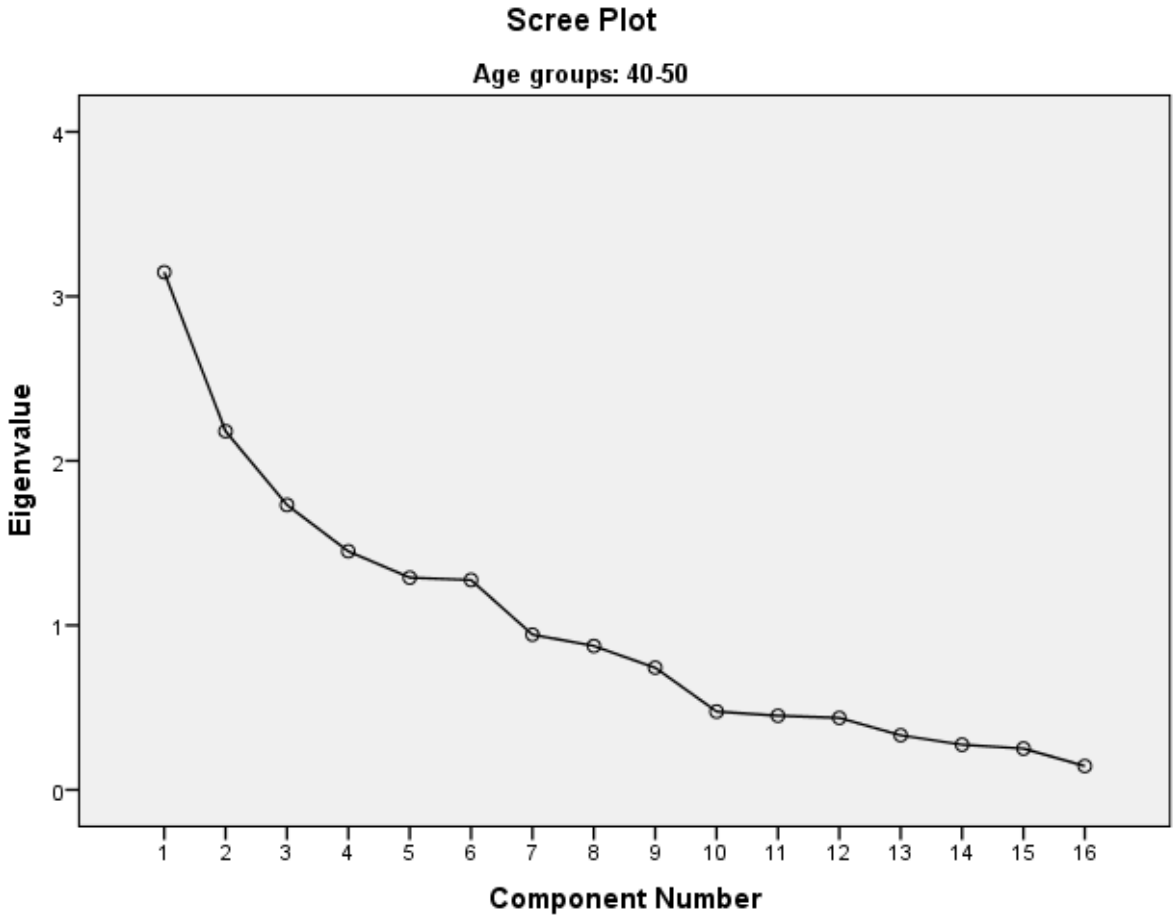
a. Age groups = 40-50

Communalities[a]

	Initial	Extraction
Area Born	1.000	.766
Parents Deceased	1.000	.799
Childhood happiness	1.000	.424
High Schools Attended	1.000	.735
Parents Attitude Toward Religion	1.000	.632
Attitude Toward Religion in Young Life	1.000	.670
Present Beliefs	1.000	.783
Devotion	1.000	.722
Primary Schools attended	1.000	.614
Contact With Parents	1.000	.800
School Area	1.000	.780
Employment Change 35-Present	1.000	.746
Number of Job Changes	1.000	.786
Years Married	1.000	.721
Times Married/LT Relationship	1.000	.489
Relationship Status	1.000	.606

Extraction Method: Principal Component Analysis.

a. Age groups = 40-50


Scree Plot
Age groups: 40-50
Eigenvalue
0
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16
Component Number

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	3.147	19.668	19.668	3.147	19.668	19.668	
2	2.180	13.623	33.291	2.180	13.623	33.291	
3	1.732	10.825	44.116	1.732	10.825	44.116	
4	1.450	9.064	53.180	1.450	9.064	53.180	
5	1.290	8.062	61.243	1.290	8.062	61.243	
6	1.276	7.974	69.216	1.276	7.974	69.216	
7	.943	5.895	75.111				
8	.875	5.468	80.579				
9	.742	4.640	85.219				
10	.476	2.974	88.193				
11	.451	2.816	91.009				
12	.437	2.733	93.742				
13	.332	2.073	95.815				
14	.274	1.714	97.528				
15	.251	1.569	99.097				
16	.144	.903	100.000				

Extraction Method: Principal Component Analysis.

a. Age groups = 40-50

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
Present Beliefs	.888					
Devotion	.827					
Attitude Toward Religion in Young Life	.780					
Parents Attitude Toward Religion	.708					
Parents Deceased		.900				
Contact With Parents		.878				
Childhood happiness		.411				
Area Born			.874			
School Area			.860			
Number of Job Changes				-.889		
Employment Change 35-Present				.862		
High Schools Attended					-.838	
Primary Schools attended					-.751	
Years Married						.821
Relationship Status						.633
Times Married/LT Relationship						-.559

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = 40-50

b. Rotation converged in 8 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
Present Beliefs	.861					
Devotion	.818					
Attitude Toward Religion in Young Life	.805					
Parents Attitude Toward Religion	.737		-.380			
Contact With Parents		.890				
Parents Deceased		.863				
Childhood happiness		.484		-.424		
School Area			.872			
Area Born			.850			
Number of Job Changes				-.879		
Employment Change 35-Present				.860		
High Schools Attended					-.823	
Primary Schools attended					-.758	
Years Married						.798
Relationship Status						.661
Times Married/LT Relationship	.376					-.610

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = 40-50

AGED > 50

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.549
Bartlett's Test of Sphericity	Approx. Chi-Square	331.209
	df	120
	Sig.	.000

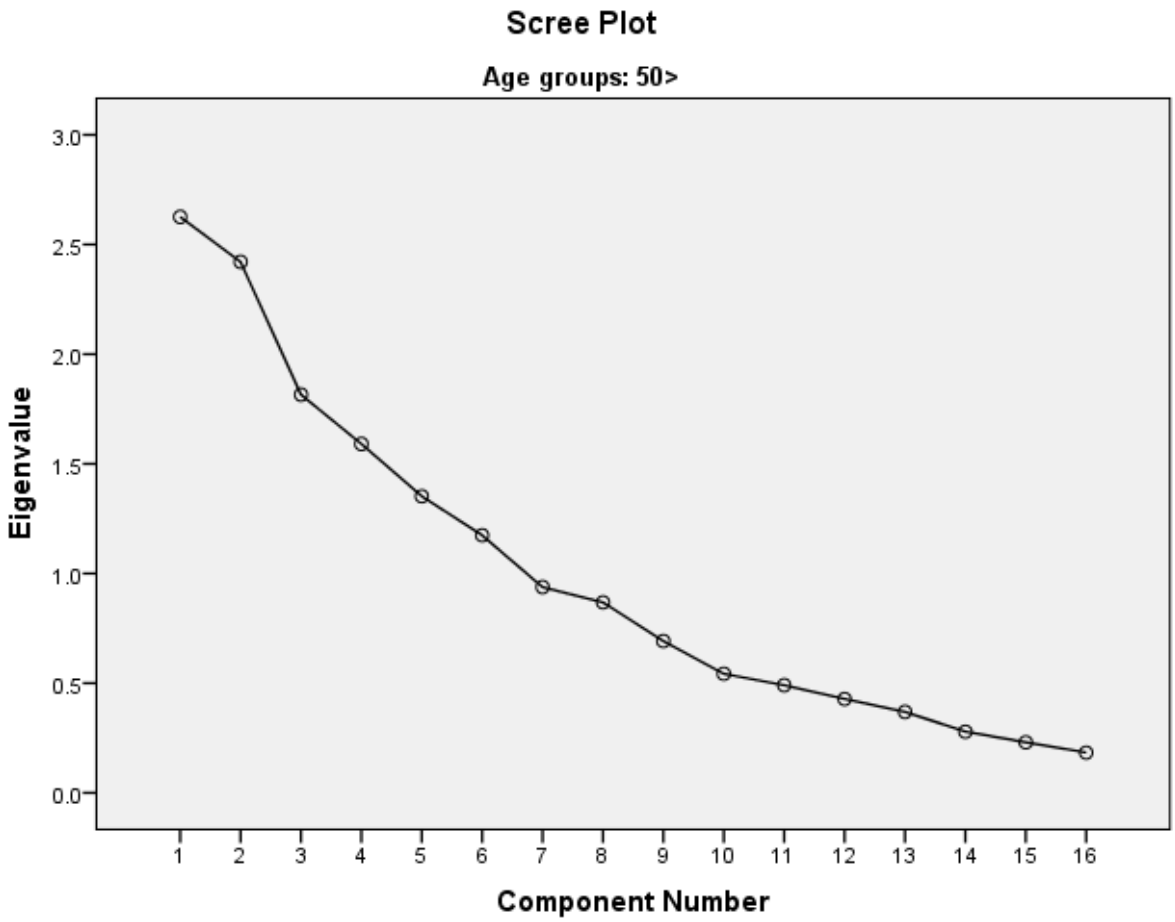
a. Age groups = 50>

Communalities[a]

	Initial	Extraction
Area Born	1.000	.739
Parents Deceased	1.000	.838
Childhood happiness	1.000	.687
High Schools Attended	1.000	.564
Parents Attitude Toward Religion	1.000	.566
Attitude Toward Religion in Young Life	1.000	.651
Present Beliefs	1.000	.756
Devotion	1.000	.631
Primary Schools attended	1.000	.713
Contact With Parents	1.000	.854
School Area	1.000	.573
Employment Change 35-Present	1.000	.721
Number of Job Changes	1.000	.803
Years Married	1.000	.745
Times Married/LT Relationship	1.000	.528
Relationship Status	1.000	.609

Extraction Method: Principal Component Analysis.

a. Age groups = 50>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Age groups: 50>
Eigenvalue
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2.0
1.5
1.0
0.5
0.0
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3
4
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14
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16
Component Number

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	2.626	16.412	16.412	2.626	16.412	16.412	
2	2.421	15.129	31.541	2.421	15.129	31.541	
3	1.815	11.347	42.888	1.815	11.347	42.888	
4	1.591	9.941	52.829	1.591	9.941	52.829	
5	1.352	8.452	61.280	1.352	8.452	61.280	
6	1.174	7.338	68.619	1.174	7.338	68.619	
7	.938	5.863	74.482				
8	.868	5.427	79.909				
9	.692	4.323	84.232				
10	.543	3.392	87.623				
11	.491	3.067	90.690				
12	.428	2.675	93.365				
13	.369	2.306	95.671				
14	.279	1.743	97.414				
15	.230	1.439	98.853				
16	.183	1.147	100.000				

Extraction Method: Principal Component Analysis.

a. Age groups = 50>

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
Present Beliefs	.810					
Attitude Toward Religion in Young Life	.792					
Devotion	.763					
Parents Attitude Toward Religion	.601					
Parents Deceased		.905				
Contact With Parents		.901				
Employment Change 35-Present			.822			
Number of Job Changes			-.811			
High Schools Attended			.465		.432	
Area Born				.840		
School Area				.685		
Primary Schools attended					.821	
Childhood happiness					.704	
Years Married						.795
Relationship Status						.777
Times Married/LT Relationship						-.590

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = 50>

b. Rotation converged in 25 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
Present Beliefs	.818					
Attitude Toward Religion in Young Life	.778					
Devotion	.773					
Parents Attitude Toward Religion	.612					
Contact With Parents		.917				
Parents Deceased		.912				
Employment Change 35-Present			.829			
Number of Job Changes			-.814			
Area Born				.826		
School Area				.691		
Primary Schools attended					.805	
Childhood happiness					.732	
High Schools Attended			.449		.503	
Relationship Status						.773
Years Married						.772
Times Married/LT Relationship						-.651

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = 50>

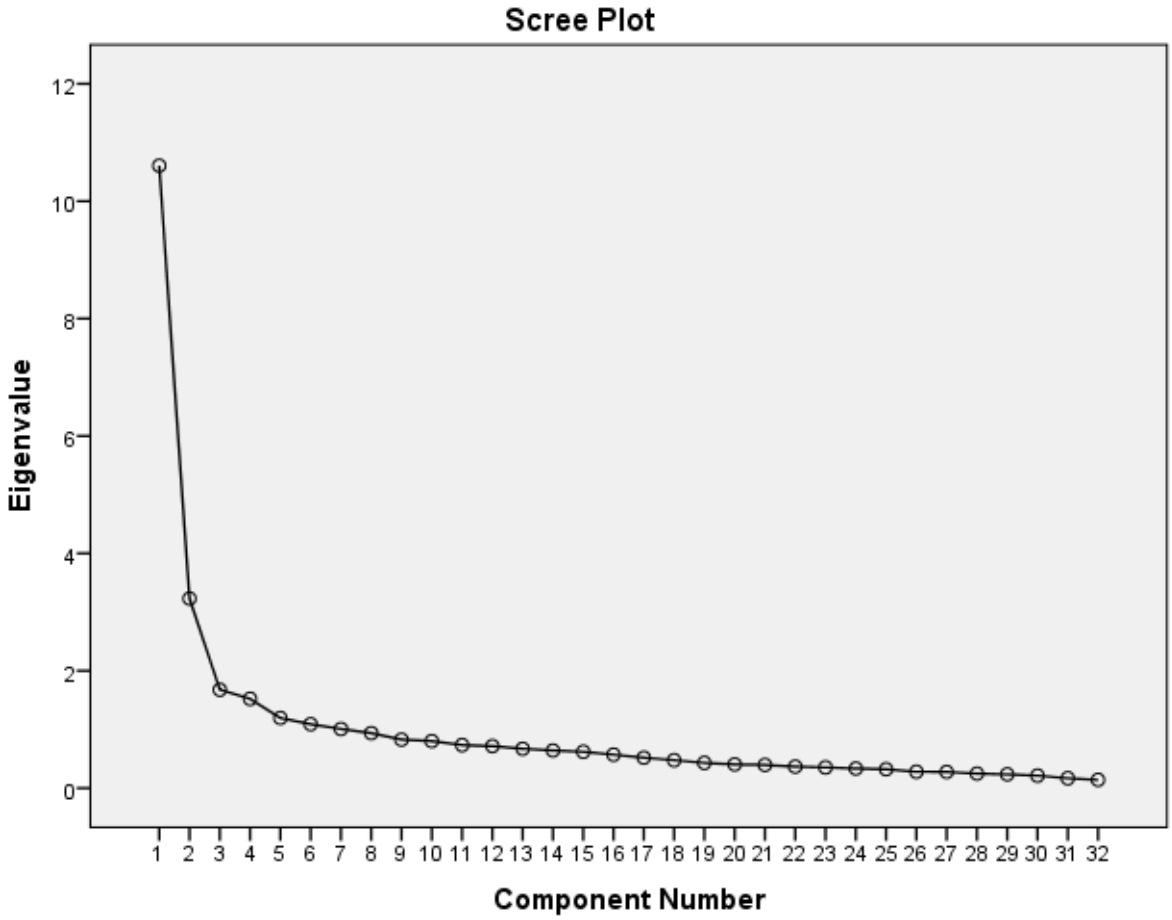
APPENDIX 3 - MIDLIFE TRANSITIONS QUESTIONNAIRE (MTQ)

PRINCIPAL COMPONENT ANALYSIS ON REDUCED VARIABLES (32)

All participants

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.902
Bartlett's Test of Sphericity	Approx. Chi-Square	3576.451
	df	496
	Sig.	.000



Communalities

	Initial	Extraction
7 Want to do job	1.000	.440
8 Right Job	1.000	.472
13 Delay the aging Process	1.000	.495
16 Achievement of Selfset Goals	1.000	.466
19 Core Values right	1.000	.651
20 Depressed about dying	1.000	.610
21 Parent died	1.000	.288
22 Own death closer	1.000	.696
23 Death inevitable	1.000	.577
26 younger gen sees as old	1.000	.376
27 Period of dissatisfaction	1.000	.531
28 values conflict at work	1.000	.615
29 Advancement disappointment	1.000	.420
31 Missed opportunities	1.000	.475
34 Compromising values to advance	1.000	.697
36 Compromising values for material gain	1.000	.452
41 Work meaningless	1.000	.469
42 No time for ambitions	1.000	.418
44 Must change, don't know what	1.000	.488
48 I waste time on trivial	1.000	.440
51 Blocked at work	1.000	.567
52 Anxiety as time goes by	1.000	.536
53 Too many person obstacles	1.000	.512
55 Problem cannot satisfy all needs	1.000	.482
56 Cannot define main goal	1.000	.378
58 Unfair, couldn't reach potential	1.000	.523
59 Position threatened by younger	1.000	.331
60 Afraid of disease	1.000	.339
63 Peers doing better	1.000	.493
66Unknown anxiety	1.000	.492

68 Depression in mid-career	1.000	.429
70 Period of difficulty solving work problems	1.000	.355

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.605	33.141	33.141	10.605	33.141	33.141
2	3.229	10.092	43.232	3.229	10.092	43.232
3	1.677	5.239	48.472	1.677	5.239	48.472
4	1.522	4.755	53.227			
5	1.195	3.733	56.960			
6	1.090	3.405	60.365			
7	1.008	3.150	63.515			
8	.938	2.931	66.446			
9	.826	2.582	69.028			
10	.802	2.506	71.534			
11	.734	2.294	73.827			
12	.717	2.239	76.066			
13	.671	2.096	78.163			
14	.641	2.003	80.166			
15	.619	1.934	82.100			
16	.571	1.783	83.883			
17	.519	1.623	85.506			
18	.475	1.486	86.992			
19	.431	1.345	88.337			
20	.404	1.263	89.600			
21	.395	1.233	90.833			
22	.366	1.145	91.978			
23	.353	1.104	93.082			
24	.334	1.043	94.125			
25	.322	1.005	95.130			
26	.279	.871	96.001			
27	.276	.863	96.864			
28	.247	.773	97.637			
29	.234	.733	98.370			
30	.213	.666	99.036			

31	.168	.526	99.562				
32	.140	.438	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a]

	Component		
	1	2	3
13 Delay the aging Process	.738		
8 Right Job	.730		
44 Must change, don't know what	.728		
51 Blocked at work	.698		
7 Want to do job	.698		
27 Period of dissatisfaction	.681		
16 Achievement of Selfset Goals	.676		
41 Work meaningless	.641		
48 I waste time on trivial	.636		
55 Problem cannot satisfy all needs	.634		
56 Cannot define main goal	.610		
63 Peers doing better	.594		
68 Depression in mid-career	.574		
29 Advancement disappointment	.567		
31 Missed opportunities	.566		
66Unknown anxiety	.550		
53 Too many person obstacles	.513		
52 Anxiety as time goes by	.512	.432	
42 No time for ambitions	.505		
70 Period of difficulty solving work problems	.489		
58 Unfair, couldn't reach potential	.465		.402
59 Position threatened by younger			
22 Own death closer		.829	

19 Core Values right		.812	
23 Death inevitable		.761	
20 Depressed about dying		.744	
26 younger gen sees as old		.565	
21 Parent died		.529	
60 Afraid of disease		.525	
34 Compromising values to advance			.805
28 values conflict at work			.717
36 Compromising values for material gain			.650

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Structure Matrix

	Component		
	1	2	3
51 Blocked at work	.730		.403
13 Delay the aging Process	.694		
44 Must change, don't know what	.687		
27 Period of dissatisfaction	.685		
55 Problem cannot satisfy all needs	.679		
63 Peers doing better	.673		
41 Work meaningless	.667		
31 Missed opportunities	.659		
66Unknown anxiety	.657		.453
8 Right Job	.657		
48 I waste time on trivial	.656		
16 Achievement of Selfset Goals	.656		
7 Want to do job	.649		
68 Depression in mid-career	.639		
53 Too many person obstacles	.633		.536
29 Advancement disappointment	.625		

58 Unfair, couldn't reach potential	.616		.571
42 No time for ambitions	.606		
52 Anxiety as time goes by	.599	.561	
56 Cannot define main goal	.592		
70 Period of difficulty solving work problems	.569		
59 Position threatened by younger	.465		.423
22 Own death closer		.832	
19 Core Values right		.802	
20 Depressed about dying		.774	
23 Death inevitable		.757	
26 younger gen sees as old		.598	
60 Afraid of disease		.563	
21 Parent died		.504	
34 Compromising values to advance			.831
28 values conflict at work			.760
36 Compromising values for material gain			.659

Extraction Method: Principal Component Analysis.

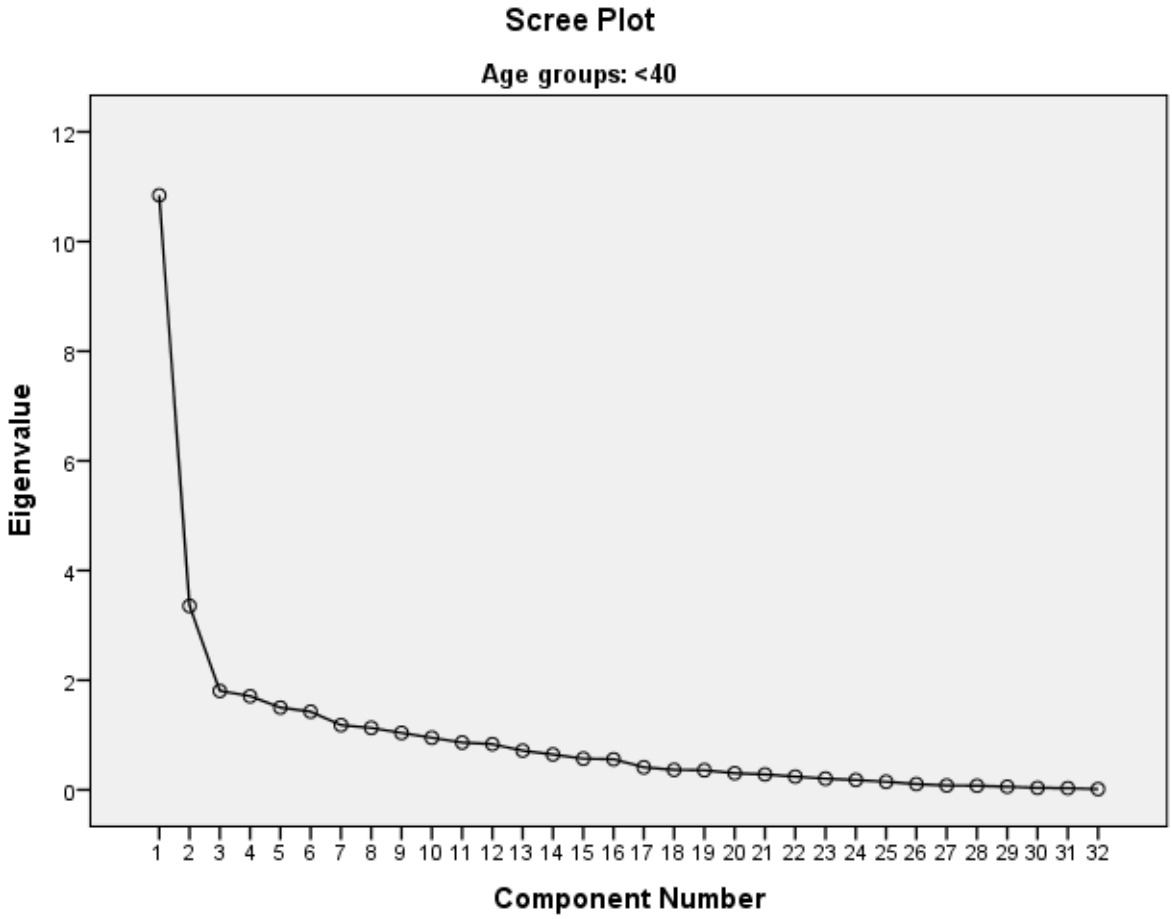
Rotation Method: Oblimin with Kaiser Normalization.

Age group below 40 N=49

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.601
Bartlett's Test of Sphericity	Approx. Chi-Square	1089.443
	df	496
	Sig.	.000

a. Age groups = <40



Communalities[a]

	Initial	Extraction
7 Want to do job	1.000	.553
8 Right Job	1.000	.590
13 Delay the aging Process	1.000	.442
16 Achievement of Selfset Goals	1.000	.492
19 Core Values right	1.000	.732
20 Depressed about dying	1.000	.639
21 Parent died	1.000	.370
22 Own death closer	1.000	.636
23 Death inevitable	1.000	.531
26 younger gen sees as old	1.000	.540
27 Period of dissatisfaction	1.000	.597
28 Conflict at work	1.000	.330
29 Advancement disappointment	1.000	.430
31 Missed opportunities	1.000	.511
34 Compromising values to advance	1.000	.369
38 wonder how to prepare for death	1.000	.343
41 Work meaningless	1.000	.524
42 No time for ambitions	1.000	.380
44 Must change, don't know what	1.000	.508
48 I waste time on trivial	1.000	.397
51 Blocked at work	1.000	.661
52 Anxiety as time goes by	1.000	.511
53 Too many person obstacles	1.000	.633
55 Problem cannot satisfy all needs	1.000	.392
56 Cannot define main goal	1.000	.504
58 Unfair, couldn't reach potential	1.000	.650
59 Position threatened by younger	1.000	.435
60 Afraid of disease	1.000	.451
63 Peers doing better	1.000	.356
66Unknown anxiety	1.000	.567

68 Depression in mid-career	1.000	.510
70 Period of difficulty solving work problems	1.000	.417

Extraction Method: Principal Component Analysis.

a. Age groups = <40

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.843	33.885	33.885	10.843	33.885	33.885
2	3.353	10.479	44.364	3.353	10.479	44.364
3	1.804	5.639	50.002	1.804	5.639	50.002
4	1.708	5.336	55.338			
5	1.501	4.692	60.030			
6	1.425	4.453	64.484			
7	1.181	3.690	68.174			
8	1.129	3.529	71.703			
9	1.038	3.244	74.947			
10	.951	2.970	77.917			
11	.862	2.693	80.611			
12	.833	2.602	83.213			
13	.715	2.234	85.446			
14	.645	2.015	87.461			
15	.569	1.778	89.239			
16	.558	1.744	90.983			
17	.410	1.280	92.264			
18	.363	1.135	93.399			
19	.358	1.118	94.517			
20	.304	.949	95.465			
21	.281	.879	96.344			
22	.242	.755	97.100			
23	.204	.637	97.737			
24	.181	.567	98.303			
25	.147	.460	98.764			
26	.105	.327	99.091			
27	.080	.249	99.340			
28	.073	.229	99.569			
29	.057	.178	99.747			
30	.036	.113	99.860			
31	.031	.095	99.955			

32	.014	.045	100.000				

Extraction Method: Principal Component Analysis.

a. Age groups = <40

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component		
	1	2	3
51 Blocked at work	.736		
53 Too many person obstacles	.720		
66Unknown anxiety	.706		
59 Position threatened by younger	.667		
58 Unfair, couldn't reach potential	.618		
41 Work meaningless	.593		
34 Compromising values to advance	.548		
28 Conflict at work	.539		
29 Advancement disappointment	.507		
27 Period of dissatisfaction	.473		.439
42 No time for ambitions	.441		
19 Core Values right		.841	
22 Own death closer		.802	
20 Depressed about dying		.737	
26 younger gen sees as old		.661	
21 Parent died		.620	
60 Afraid of disease		.568	
23 Death inevitable	-.502	.505	.458
44 Must change, don't know what			.718
56 Cannot define main goal			.685
8 Right Job			.662
31 Missed opportunities			.651
7 Want to do job			.604
38 wonder how to prepare for death			.597

13 Delay the aging Process			.484
68 Depression in mid-career			.472
70 Period of difficulty solving work problems			.468
48 I waste time on trivial			.443
16 Achievement of Self-set Goals			.416
52 Anxiety as time goes by			.415
63 Peers doing better			.408
55 Problem cannot satisfy all needs			

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = <40

b. Rotation converged in 26 iterations.

Structure Matrix[a]

	Component		
	1	2	3
51 Blocked at work	.800		.477
53 Too many person obstacles	.783		.451
58 Unfair, couldn't reach potential	.749		.546
66Unknown anxiety	.738		
41 Work meaningless	.681		.437
27 Period of dissatisfaction	.667		.647
59 Position threatened by younger	.626		
29 Advancement disappointment	.617		.473
34 Compromising values to advance	.593		
28 Conflict at work	.567		
42 No time for ambitions	.560		.446
19 Core Values right		.854	
22 Own death closer		.795	
20 Depressed about dying		.740	
26 younger gen sees as old		.702	

21 Parent died		.588	
60 Afraid of disease		.581	
23 Death inevitable		.524	
8 Right Job	.477		.750
7 Want to do job	.500		.713
31 Missed opportunities	.420		.703
44 Must change, don't know what			.699
56 Cannot define main goal			.685
68 Depression in mid-career	.578		.620
13 Delay the aging Process	.422		.606
16 Achievement of Self-set Goals	.553		.603
52 Anxiety as time goes by	.481	.449	.592
70 Period of difficulty solving work problems	.491		.575
48 I waste time on trivial	.413		.568
38 wonder how to prepare for death			.543
63 Peers doing better	.452		.541
55 Problem cannot satisfy all needs	.440	.405	.496

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

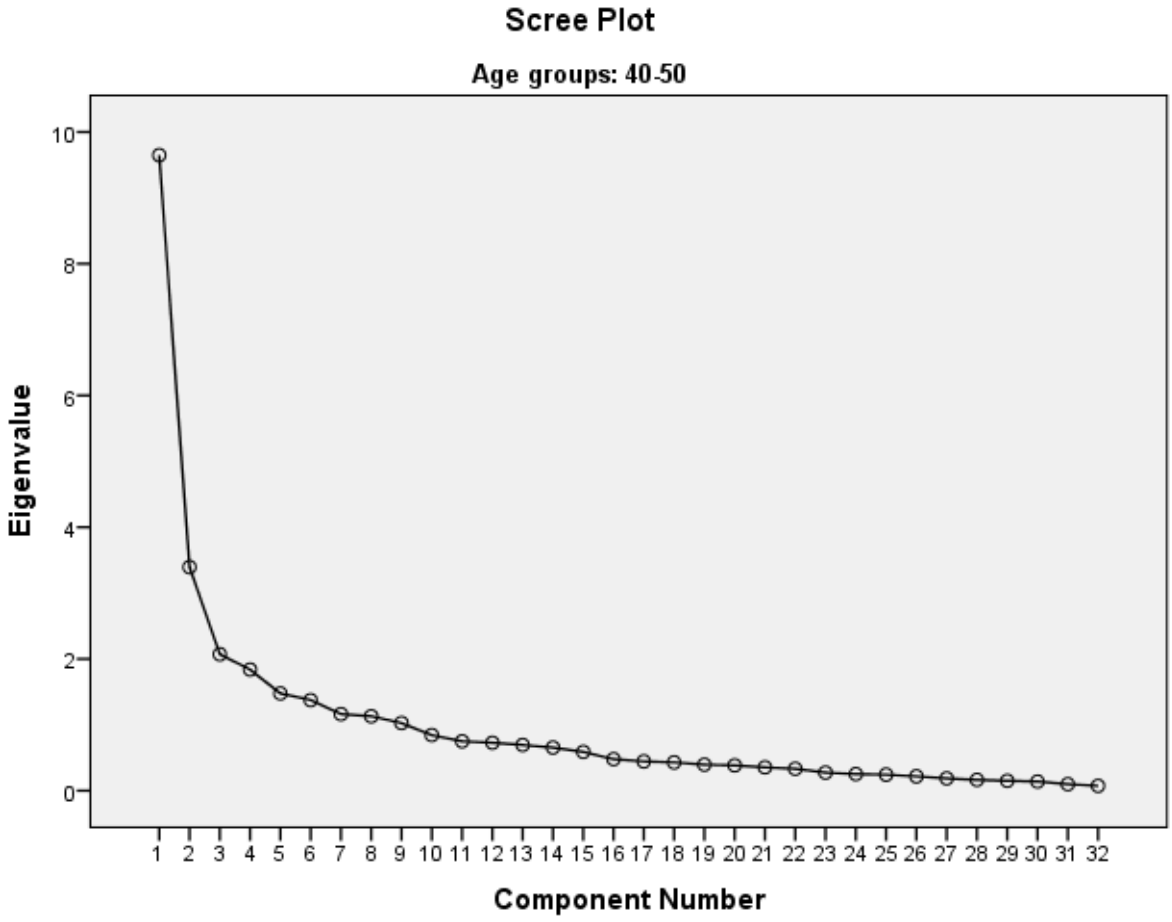
a. Age groups = <40

Aged between 40 and 50 N = 94

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.818
Bartlett's Test of Sphericity	Approx. Chi-Square	1676.297
	df	496
	Sig.	.000

a. Age groups = 40-50



Communalities[a]

	Initial	Extraction
7 Want to do job	1.000	.608
8 Right Job	1.000	.581
13 Delay the aging Process	1.000	.510
16 Achievement of Selfset Goals	1.000	.523
19 Core Values right	1.000	.673
20 Depressed about dying	1.000	.651
21 Parent died	1.000	.152
22 Own death closer	1.000	.673
23 Death inevitable	1.000	.549
26 younger gen sees as old	1.000	.261
27 Period of dissatisfaction	1.000	.523
28 Conflict at work	1.000	.633
29 Advancement disappointment	1.000	.345
31 Missed opportunities	1.000	.424
34 Compromising values to advance	1.000	.693
38 wonder how to prepare for death	1.000	.391
41 Work meaningless	1.000	.524
42 No time for ambitions	1.000	.370
44 Must change, don't know what	1.000	.586
48 I waste time on trivial	1.000	.451
51 Blocked at work	1.000	.527
52 Anxiety as time goes by	1.000	.556
53 Too many person obstacles	1.000	.387
55 Problem cannot satisfy all needs	1.000	.472
56 Cannot define main goal	1.000	.317
58 Unfair, couldn't reach potential	1.000	.322
59 Position threatened by younger	1.000	.360
60 Afraid of disease	1.000	.366
63 Peers doing better	1.000	.508
66Unknown anxiety	1.000	.396

68 Depression in mid-career	1.000	.347
70 Period of difficulty solving work problems	1.000	.434

Extraction Method: Principal Component Analysis.

a. Age groups = 40-50

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.648	30.151	30.151	9.648	30.151	30.151
2	3.394	10.607	40.757	3.394	10.607	40.757
3	2.071	6.472	47.229	2.071	6.472	47.229
4	1.839	5.748	52.977			
5	1.476	4.613	57.591			
6	1.375	4.298	61.889			
7	1.162	3.631	65.520			
8	1.130	3.533	69.053			
9	1.026	3.206	72.259			
10	.844	2.636	74.895			
11	.750	2.343	77.238			
12	.728	2.274	79.512			
13	.694	2.167	81.679			
14	.655	2.048	83.728			
15	.589	1.842	85.569			
16	.478	1.494	87.064			
17	.445	1.390	88.454			
18	.430	1.343	89.796			
19	.395	1.235	91.032			
20	.384	1.200	92.232			
21	.354	1.106	93.338			
22	.333	1.039	94.377			
23	.275	.860	95.237			
24	.252	.786	96.023			
25	.243	.759	96.782			
26	.217	.678	97.460			
27	.188	.586	98.046			
28	.164	.513	98.560			
29	.150	.470	99.030			

30	.138	.432	99.462				
31	.098	.307	99.769				
32	.074	.231	100.000				

Extraction Method: Principal Component Analysis.

a. Age groups = 40-50

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component		
	1	2	3
7 Want to do job	.794		
8 Right Job	.773		
44 Must change, don't know what	.758		
41 Work meaningless	.744		
16 Achievement of Self-set Goals	.706		
51 Blocked at work	.705		
13 Delay the aging Process	.700		
27 Period of dissatisfaction	.680		
63 Peers doing better	.622		
48 I waste time on trivial	.580		
55 Problem cannot satisfy all needs	.579		
42 No time for ambitions	.555		
66Unknown anxiety	.534		
29 Advancement disappointment	.525		
31 Missed opportunities	.515		
68 Depression in mid-career	.491		
56 Cannot define main goal	.483		
53 Too many person obstacles	.446		
58 Unfair, couldn't reach potential	.401		
59 Position threatened by younger			
19 Core Values right		.850	
22 Own death closer		.805	

20 Depressed about dying		.786	
23 Death inevitable		.699	
60 Afraid of disease		.560	
52 Anxiety as time goes by	.483	.505	
26 younger gen sees as old		.430	
34 Compromising values to advance			.824
28 Conflict at work			.748
38 wonder how to prepare for death			.597
70 Period of difficulty solving work problems			.405
21 Parent died			

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = 40-50

b. Rotation converged in 8 iterations.

Structure Matrix[a]

	Component		
	1	2	3
44 Must change, don't know what	.765		
13 Delay the aging Process	.713		
16 Achievement of Self-set Goals	.713		
51 Blocked at work	.711		
41 Work meaningless	.703		
7 Want to do job	.702		
8 Right Job	.673		
63 Peers doing better	.670		
27 Period of dissatisfaction	.649		
55 Problem cannot satisfy all needs	.636		
48 I waste time on trivial	.631		
42 No time for ambitions	.592		
66Unknown anxiety	.590		
31 Missed opportunities	.589		

29 Advancement disappointment	.568		
68 Depression in mid-career	.542		
53 Too many person obstacles	.531		.417
56 Cannot define main goal	.520		
58 Unfair, couldn't reach potential	.479		
59 Position threatened by younger	.456	.454	
22 Own death closer		.818	
19 Core Values right		.795	
20 Depressed about dying		.780	
23 Death inevitable		.730	
60 Afraid of disease		.590	
52 Anxiety as time goes by	.567	.583	
26 younger gen sees as old		.480	
34 Compromising values to advance			.823
28 Conflict at work			.736
38 wonder how to prepare for death			.613
70 Period of difficulty solving work problems	.497		.515
21 Parent died			

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

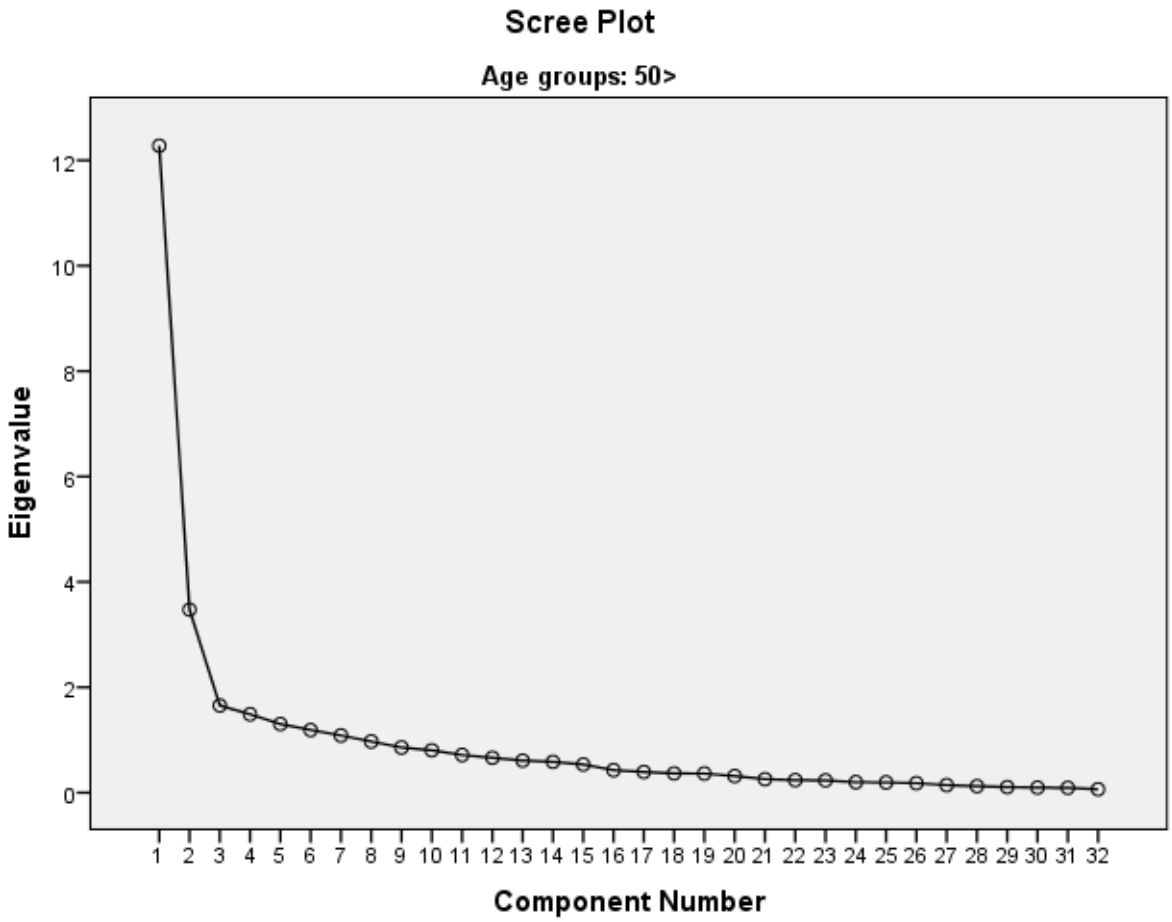
a. Age groups = 40-50

Aged 50 plus N=76

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.848
Bartlett's Test of Sphericity	Approx. Chi-Square	1622.479
	df	496
	Sig.	.000

a. Age groups = 50>



Communalities[a]

	Initial	Extraction
7 Want to do job	1.000	.442
8 Right Job	1.000	.427
13 Delay the aging Process	1.000	.414
16 Achievement of Selfset Goals	1.000	.398
19 Core Values right	1.000	.714
20 Depressed about dying	1.000	.696
21 Parent died	1.000	.401
22 Own death closer	1.000	.661
23 Death inevitable	1.000	.663
26 younger gen sees as old	1.000	.456
27 Period of dissatisfaction	1.000	.651
28 Conflict at work	1.000	.590
29 Advancement disappointment	1.000	.529
31 Missed opportunities	1.000	.617
34 Compromising values to advance	1.000	.515
38 wonder how to prepare for death	1.000	.280
41 Work meaningless	1.000	.621
42 No time for ambitions	1.000	.567
44 Must change, don't know what	1.000	.433
48 I waste time on trivial	1.000	.607
51 Blocked at work	1.000	.637
52 Anxiety as time goes by	1.000	.576
53 Too many person obstacles	1.000	.650
55 Problem cannot satisfy all needs	1.000	.591
56 Cannot define main goal	1.000	.558
58 Unfair, couldn't reach potential	1.000	.606
59 Position threatened by younger	1.000	.405
60 Afraid of disease	1.000	.353
63 Peers doing better	1.000	.611
66Unknown anxiety	1.000	.649

68 Depression in mid-career	1.000	.635
70 Period of difficulty solving work problems	1.000	.449

Extraction Method: Principal Component Analysis.

a. Age groups = 50>

Pattern Matrix[a,b]

	Component		
	1	2	3
27 Period of dissatisfaction	.805		
28 Conflict at work	.781		
41 Work meaningless	.778		
34 Compromising values to advance	.734		
7 Want to do job	.672		
8 Right Job	.616		
29 Advancement disappointment	.602		
59 Position threatened by younger	.506		
55 Problem cannot satisfy all needs	.480		
38 wonder how to prepare for death	.425		
19 Core Values right		.869	
23 Death inevitable		.827	
20 Depressed about dying		.812	
22 Own death closer		.801	
21 Parent died		.629	
26 younger gen sees as old		.578	
52 Anxiety as time goes by		.511	-.408
60 Afraid of disease		.452	
56 Cannot define main goal			-.807
48 I waste time on trivial			-.792
42 No time for ambitions			-.621
53 Too many person obstacles			-.619
63 Peers doing better			-.610

16 Achievement of Self-set Goals			-.601
66Unknown anxiety			-.597
70 Period of difficulty solving work problems			-.566
44 Must change, don't know what			-.509
13 Delay the aging Process			-.482
58 Unfair, couldn't reach potential	.444		-.476
51 Blocked at work	.432		-.475
31 Missed opportunities			-.466
68 Depression in mid-career			

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = 50>

b. Rotation converged in 13 iterations.

Structure Matrix[a]

	Component		
	1	2	3
27 Period of dissatisfaction	.806		-.422
41 Work meaningless	.787		-.423
28 Conflict at work	.753		
34 Compromising values to advance	.715		
29 Advancement disappointment	.706		-.516
55 Problem cannot satisfy all needs	.682		-.631
7 Want to do job	.661		
8 Right Job	.651		
59 Position threatened by younger	.587		-.410
38 wonder how to prepare for death	.510		
19 Core Values right		.842	
20 Depressed about dying		.815	

23 Death inevitable		.813	
22 Own death closer		.808	
52 Anxiety as time goes by		.657	-.591
26 younger gen sees as old		.634	
21 Parent died		.625	
60 Afraid of disease		.540	-.414
66Unknown anxiety	.611		-.766
48 I waste time on trivial	.437		-.764
63 Peers doing better	.519	.412	-.754
53 Too many person obstacles	.629		-.740
56 Cannot define main goal			-.740
42 No time for ambitions	.445	.424	-.730
51 Blocked at work	.685		-.708
31 Missed opportunities	.657		-.704
68 Depression in mid-career	.592	.538	-.681
58 Unfair, couldn't reach potential	.675		-.677
70 Period of difficulty solving work problems	.458		-.656
44 Must change, don't know what		.437	-.615
13 Delay the aging Process	.502		-.605
16 Achievement of Self-set Goals			-.596

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

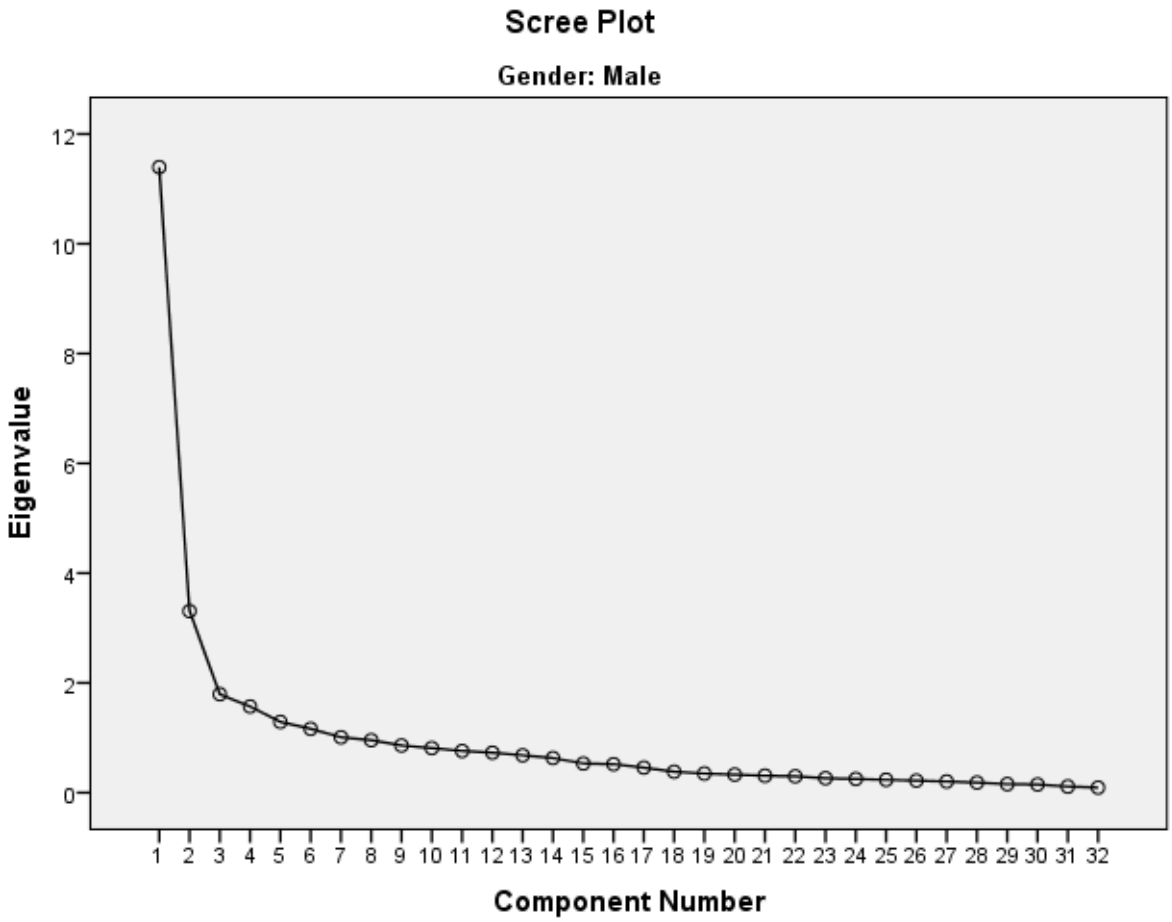
a. Age groups = 50>

Males N = 114

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.868
Bartlett's Test of Sphericity	Approx. Chi-Square	2195.315
	df	496
	Sig.	.000

a. Gender = Male



Communalities[a]

	Initial	Extraction
7 Want to do job	1.000	.497
8 Right Job	1.000	.532
13 Delay the aging Process	1.000	.489
16 Achievement of Self-set Goals	1.000	.489
19 Core Values right	1.000	.626
20 Depressed about dying	1.000	.613
21 Parent died	1.000	.154
22 Own death closer	1.000	.591
23 Death inevitable	1.000	.510
26 younger gen sees as old	1.000	.436
27 Period of dissatisfaction	1.000	.581
28 Conflict at work	1.000	.564
29 Advancement disappointment	1.000	.478
31 Missed opportunities	1.000	.551
34 Compromising values to advance	1.000	.727
38 wonder how to prepare for death	1.000	.599
41 Work meaningless	1.000	.475
42 No time for ambitions	1.000	.418
44 Must change, don't know what	1.000	.511
48 I waste time on trivial	1.000	.496
51 Blocked at work	1.000	.629
52 Anxiety as time goes by	1.000	.551
53 Too many person obstacles	1.000	.555
55 Problem cannot satisfy all needs	1.000	.546
56 Cannot define main goal	1.000	.486
58 Unfair, couldn't reach potential	1.000	.552
59 Position threatened by younger	1.000	.362
60 Afraid of disease	1.000	.476
63 Peers doing better	1.000	.555

66Unknown anxiety	1.000	.558
68 Depression in mid-career	1.000	.477
70 Period of difficulty solving work problems	1.000	.413

Extraction Method: Principal Component Analysis.

a. Gender = Male

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.395	35.611	35.611	11.395	35.611	35.611
2	3.308	10.339	45.950	3.308	10.339	45.950
3	1.793	5.603	51.553	1.793	5.603	51.553
4	1.570	4.906	56.459			
5	1.289	4.028	60.488			
6	1.163	3.634	64.121			
7	1.010	3.155	67.277			
8	.955	2.986	70.263			
9	.860	2.687	72.949			
10	.813	2.539	75.489			
11	.760	2.376	77.865			
12	.729	2.279	80.144			
13	.681	2.129	82.274			
14	.631	1.970	84.244			
15	.532	1.663	85.908			
16	.519	1.622	87.530			
17	.457	1.427	88.957			
18	.382	1.195	90.152			
19	.349	1.091	91.243			
20	.328	1.025	92.269			
21	.310	.968	93.236			
22	.298	.932	94.168			
23	.264	.824	94.992			
24	.251	.783	95.775			
25	.234	.733	96.508			
26	.219	.684	97.192			
27	.204	.636	97.828			
28	.184	.575	98.403			

29	.155	.486	98.888				
30	.150	.470	99.358				
31	.112	.351	99.709				
32	.093	.291	100.000				

Extraction Method: Principal Component Analysis.

a. Gender = Male

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component		
	1	2	3
8 Right Job	.795		
51 Blocked at work	.786		
27 Period of dissatisfaction	.780		
7 Want to do job	.766		
13 Delay the aging Process	.692		
44 Must change, don't know what	.687		
53 Too many person obstacles	.651		
29 Advancement disappointment	.633		
16 Achievement of Self-set Goals	.623		
55 Problem cannot satisfy all needs	.613		
41 Work meaningless	.609		
56 Cannot define main goal	.602		
63 Peers doing better	.589		
66Unknown anxiety	.549		
58 Unfair, couldn't reach potential	.532		
48 I waste time on trivial	.509		
31 Missed opportunities	.508		
70 Period of difficulty solving work problems	.479		
68 Depression in mid-career	.477		
42 No time for ambitions			
19 Core Values right		.817	

20 Depressed about dying		.767	
22 Own death closer		.764	
23 Death inevitable		.729	
26 younger gen sees as old		.666	
60 Afraid of disease		.647	
52 Anxiety as time goes by		.596	
59 Position threatened by younger			
21 Parent died			
34 Compromising values to advance			.845
38 wonder how to prepare for death			.770
28 Conflict at work			.653

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Gender = Male

b. Rotation converged in 7 iterations.

Structure Matrix[a]

	Component		
	1	2	3
51 Blocked at work	.781		
27 Period of dissatisfaction	.735		
53 Too many person obstacles	.717		.424
55 Problem cannot satisfy all needs	.705	.416	
13 Delay the aging Process	.698		
63 Peers doing better	.694	.464	
66Unknown anxiety	.683	.444	.419
16 Achievement of Self-set Goals	.678		
29 Advancement disappointment	.675		
44 Must change, don't know what	.674		
8 Right Job	.670		
41 Work meaningless	.670		

7 Want to do job	.668		
58 Unfair, couldn't reach potential	.666		.514
31 Missed opportunities	.659	.415	.486
56 Cannot define main goal	.632	.427	
48 I waste time on trivial	.626	.498	
68 Depression in mid-career	.613	.454	
70 Period of difficulty solving work problems	.586		.427
42 No time for ambitions	.546	.428	.411
19 Core Values right		.782	
20 Depressed about dying		.781	
22 Own death closer		.768	
23 Death inevitable		.712	
52 Anxiety as time goes by	.485	.683	
60 Afraid of disease		.671	
26 younger gen sees as old		.660	
59 Position threatened by younger	.404	.489	
21 Parent died			
34 Compromising values to advance			.851
38 wonder how to prepare for death			.766
28 Conflict at work	.421		.698

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

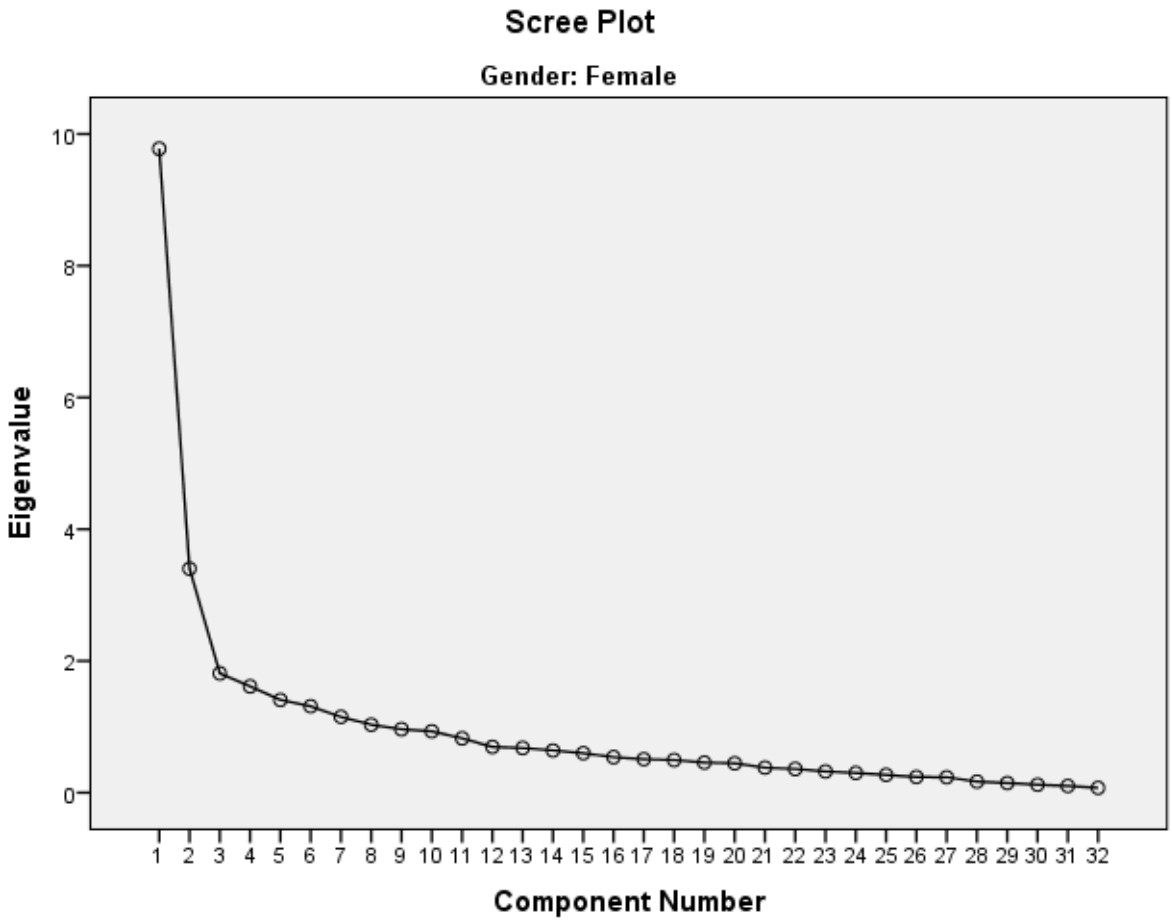
a. Gender = Male

Females N = 105

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.818
Bartlett's Test of Sphericity	Approx. Chi-Square	1800.829
	df	496
	Sig.	.000

a. Gender = Female



Communalities[a]

	Initial	Extraction
7 Want to do job	1.000	.431
8 Right Job	1.000	.462
13 Delay the aging Process	1.000	.499
16 Achievement of Selfset Goals	1.000	.444
19 Core Values right	1.000	.663
20 Depressed about dying	1.000	.610
21 Parent died	1.000	.418
22 Own death closer	1.000	.817
23 Death inevitable	1.000	.643
26 younger gen sees as old	1.000	.328
27 Period of dissatisfaction	1.000	.577
28 Conflict at work	1.000	.721
29 Advancement disappointment	1.000	.385
31 Missed opportunities	1.000	.497
34 Compromising values to advance	1.000	.683
38 wonder how to prepare for death	1.000	.279
41 Work meaningless	1.000	.477
42 No time for ambitions	1.000	.474
44 Must change, don't know what	1.000	.487
48 I waste time on trivial	1.000	.403
51 Blocked at work	1.000	.518
52 Anxiety as time goes by	1.000	.577
53 Too many person obstacles	1.000	.470
55 Problem cannot satisfy all needs	1.000	.414
56 Cannot define main goal	1.000	.243
58 Unfair, couldn't reach potential	1.000	.422
59 Position threatened by younger	1.000	.319
60 Afraid of disease	1.000	.198
63 Peers doing better	1.000	.428
66Unknown anxiety	1.000	.441

68 Depression in mid-career	1.000	.373
70 Period of difficulty solving work problems	1.000	.288

Extraction Method: Principal Component Analysis.

a. Gender = Female

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.776	30.550	30.550	9.776	30.550	30.550
2	3.400	10.625	41.175	3.400	10.625	41.175
3	1.812	5.662	46.837	1.812	5.662	46.837
4	1.614	5.043	51.880			
5	1.409	4.402	56.281			
6	1.312	4.100	60.381			
7	1.151	3.596	63.977			
8	1.032	3.224	67.201			
9	.963	3.011	70.212			
10	.932	2.912	73.124			
11	.824	2.576	75.700			
12	.695	2.172	77.872			
13	.679	2.121	79.992			
14	.641	2.003	81.995			
15	.600	1.875	83.870			
16	.539	1.685	85.555			
17	.509	1.590	87.145			
18	.496	1.549	88.694			
19	.457	1.427	90.121			
20	.447	1.397	91.518			
21	.379	1.185	92.702			
22	.361	1.127	93.829			
23	.322	1.006	94.835			
24	.299	.936	95.771			
25	.270	.843	96.613			
26	.238	.744	97.357			
27	.235	.735	98.092			
28	.168	.524	98.616			
29	.147	.459	99.074			

30	.121	.379	99.453				
31	.102	.318	99.771				
32	.073	.229	100.000				

Extraction Method: Principal Component Analysis.

a. Gender = Female

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component		
	1	2	3
13 Delay the aging Process	.750		
31 Missed opportunities	.743		
44 Must change, don't know what	.709		
16 Achievement of Self-set Goals	.698		
52 Anxiety as time goes by	.685		
42 No time for ambitions	.675		
48 I waste time on trivial	.631		
55 Problem cannot satisfy all needs	.613		
51 Blocked at work	.600		
63 Peers doing better	.573		
8 Right Job	.551		
7 Want to do job	.542		
41 Work meaningless	.533		
68 Depression in mid-career	.527		
29 Advancement disappointment	.510		
56 Cannot define main goal	.502		
70 Period of difficulty solving work problems	.421		
59 Position threatened by younger			
22 Own death closer		.902	
19 Core Values right		.812	
23 Death inevitable		.805	
20 Depressed about dying		.746	

21 Parent died		.653	
26 younger gen sees as old		.489	
60 Afraid of disease			
28 Conflict at work			.870
34 Compromising values to advance			.803
53 Too many person obstacles			.512
27 Period of dissatisfaction	.427		.491
38 wonder how to prepare for death			.462
66Unknown anxiety			.413
58 Unfair, couldn't reach potential			.402

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Gender = Female

b. Rotation converged in 10 iterations.

Structure Matrix[a]

	Component		
	1	2	3
52 Anxiety as time goes by	.698	.430	
31 Missed opportunities	.697		
13 Delay the aging Process	.696		
44 Must change, don't know what	.693		
51 Blocked at work	.687		.475
42 No time for ambitions	.685		
8 Right Job	.639		.468
55 Problem cannot satisfy all needs	.636		
63 Peers doing better	.631		
7 Want to do job	.629		.431
16 Achievement of Self-set Goals	.623		
48 I waste time on trivial	.622		
41 Work meaningless	.615		.498
68 Depression in mid-career	.594		

29 Advancement disappointment	.591		.416
59 Position threatened by younger	.507		.433
70 Period of difficulty solving work problems	.507		
56 Cannot define main goal	.493		
22 Own death closer		.903	
19 Core Values right		.812	
23 Death inevitable		.799	
20 Depressed about dying		.773	
21 Parent died		.620	
26 younger gen sees as old		.537	
60 Afraid of disease		.425	
28 Conflict at work			.846
34 Compromising values to advance			.810
27 Period of dissatisfaction	.606		.657
53 Too many person obstacles	.502		.632
66Unknown anxiety	.544		.568
58 Unfair, couldn't reach potential	.536		.555
38 wonder how to prepare for death			.484

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

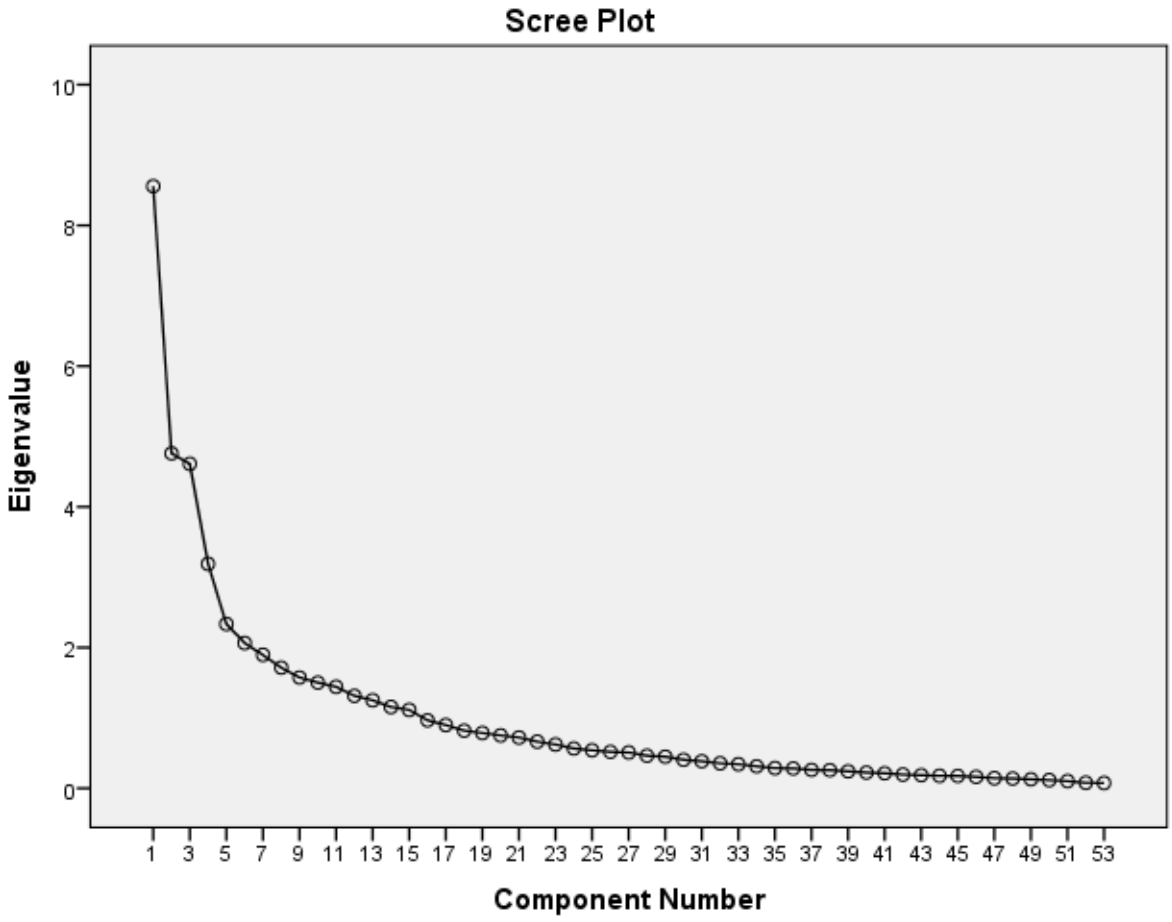
a. Gender = Female

APPENDIX 4 - Big Five dimensions PCA

All participants

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.727
Bartlett's Test of Sphericity	Approx. Chi-Square	6814.313
	df	1378
	Sig.	.000



Communalities

	Initial	Extraction
1311 S	1.000	.699
2312 S	1.000	.662
3313 S	1.000	.682
4312 S	1.000	.639
5322 S	1.000	.692
6323 S	1.000	.717
7331 S	1.000	.688
8332 S	1.000	.775
9333 S	1.000	.754
10241 S	1.000	.733
11342 S	1.000	.682
12343 S	1.000	.742
13351 S	1.000	.687
14352 S	1.000	.749
15353 S	1.000	.701
16361 S	1.000	.710
17362 S	1.000	.697
18363 S	1.000	.714
19371 I	1.000	.507
20372 I	1.000	.705
21373 I	1.000	.608
22381 I	1.000	.661
23382 I	1.000	.766
24383 I	1.000	.772
25391 I	1.000	.724
26392 I	1.000	.852
27393 I	1.000	.779
283101 I	1.000	.706
293102 I	1.000	.727
303103 I	1.000	.728
313111 I	1.000	.727
323112 I	1.000	.778
333113 I	1.000	.777
343121 I	1.000	.754
353122 I	1.000	.786
363123 I	1.000	.761
373131 C	1.000	.711

383132 C	1.000	.675
393133 C	1.000	.707
303141 C	1.000	.784
413142 C	1.000	.804
423143 C	1.000	.795
433151 C	1.000	.725
443153 C	1.000	.620
453161 C	1.000	.606
463162 C	1.000	.815
473163 C	1.000	.777
483171 C	1.000	.692
493172 C	1.000	.835
503173 C	1.000	.751
513181 C	1.000	.739
523182 C	1.000	.788
523183 C	1.000	.812

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.544	16.430	16.430	8.544	16.430	16.430
2	4.721	9.078	25.508	4.721	9.078	25.508
3	4.489	8.632	34.140	4.489	8.632	34.140
4	3.163	6.083	40.223	3.163	6.083	40.223
5	2.331	4.483	44.706	2.331	4.483	44.706
6	2.061	3.963	48.669	2.061	3.963	48.669
7	1.884	3.622	52.291	1.884	3.622	52.291
8	1.711	3.290	55.581			
9	1.565	3.009	58.591			
10	1.475	2.837	61.427			
11	1.427	2.745	64.172			
12	1.289	2.478	66.650			
13	1.249	2.402	69.051			

Pattern Matrix[a]

	Component						
	Stab fam-rel	Closed all	Neur fam-rel	Intro all	Stab work	Close/intro work	Close all
8332 S	.764						
2312 S	.747						
5322 S	.718						
3313 S	.711						
6323 S	.700						
9333 S	.689						
12343 S	.551						
11342 S	.458						
523182 C		.765					
523183 C		.749					
463162 C		.743					
513181 C		.627					
473163 C		.621					
453161 C		.543					
15353 S			-.795				
14352 S			-.710				
17362 S			-.605				
18363 S			-.595				
21373 I			-.563				
20372 I			-.439				
13351 S			-.407				
26392 I				.829			
293102 I				.734			
27393 I				.696			
25391 I				.614			
283101 I				.588			
303103 I				.528			
353122 I				.527			
24383 I				.510			
23382 I				.501			
363123 I							
323112 I							
10241 S					.801		
7331 S					.666		
16361 S					.577		

1311 S					.567		
4312 S					.533		
483171 C					-.441		
373131 C						.687	
393133 C						.639	
383132 C						.520	
313111 I						.512	
343121 I						.453	
22381 I						.415	
333113 I							
303141 C							.743
413142 C							.669
423143 C							.660
433151 C							.538
503173 C							.481
443153 C							.451
493172 C							

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 27 iterations.

Structure Matrix

	Component						
	1	2	3	4	5	6	7
8332 S	.801						
3313 S	.741						
5322 S	.737						
2312 S	.729						
6323 S	.720						
9333 S	.711						
12343 S	.603						
11342 S	.553				.441		
523182 C		.754					
523183 C		.744					
463162 C		.729					
513181 C		.635					
473163 C		.617					
453161 C		.581					

15353 S			-.772				
14352 S			-.728				
18363 S			-.603				
17362 S			-.595				
21373 I			-.575				
20372 I			-.497				
13351 S			-.435		.401		
26392 I				.784			
27393 I				.696			
293102 I				.693			
353122 I				.616			
23382 I	.421			.601			
24383 I				.587			
25391 I				.583			
283101 I				.573			
303103 I				.569			
323112 I	.424			.538			
363123 I				.510			
333113 I				.485		.479	
10241 S					.788		
7331 S					.708		
16361 S					.622		
1311 S					.617		
4312 S					.559		
483171 C					-.484		.474
373131 C						.690	
393133 C						.665	
313111 I						.575	
383132 C						.530	
343121 I						.516	
22381 I				.404		.491	
303141 C							.754
423143 C							.696
413142 C							.691
433151 C							.609
503173 C							.556
443153 C							.533
493172 C		.408					.483

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

AGE SPLIT

UNDER 40

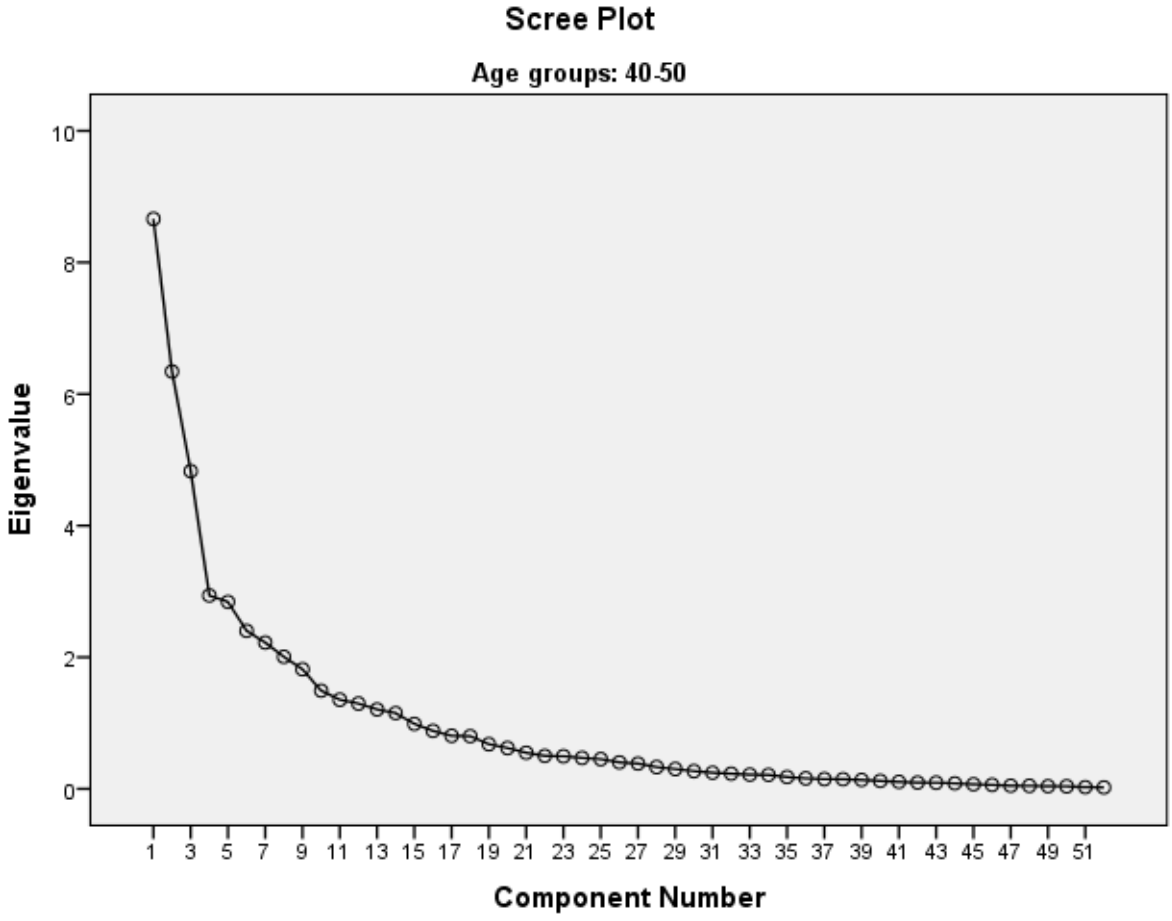
KMO INADEQUATE

40- 50

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.601
Bartlett's Test of Sphericity	Approx. Chi-Square	3819.008
	df	1326
	Sig.	.000

a. Age groups = 40-50



Communalities[a]

	Initial	Extraction
1311 S	1.000	.684
2312 S	1.000	.693
3313 S	1.000	.663
4312 S	1.000	.377
5322 S	1.000	.637
6323 S	1.000	.546
7331 S	1.000	.399
8332 S	1.000	.612
9333 S	1.000	.635
10241 S	1.000	.572
11342 S	1.000	.473
12343 S	1.000	.533
13351 S	1.000	.485
14352 S	1.000	.618
15353 S	1.000	.690
16361 S	1.000	.472
17362 S	1.000	.506
18363 S	1.000	.493
20372 I	1.000	.428
21373 I	1.000	.504
22381 I	1.000	.400
23382 I	1.000	.507
24383 I	1.000	.563
25391 I	1.000	.601
26392 I	1.000	.701
27393 I	1.000	.624
283101 I	1.000	.443
293102 I	1.000	.324
303103 I	1.000	.597
313111 I	1.000	.457
323112 I	1.000	.639
333113 I	1.000	.574
343121 I	1.000	.311
353122 I	1.000	.526
363123 I	1.000	.578
373131 C	1.000	.350
383132 C	1.000	.318
393133 C	1.000	.378

303141 C	1.000	.524
413142 C	1.000	.616
423143 C	1.000	.543
433151 C	1.000	.618
443153 C	1.000	.470
453161 C	1.000	.468
463162 C	1.000	.549
473163 C	1.000	.417
483171 C	1.000	.603
493172 C	1.000	.711
503173 C	1.000	.747
513181 C	1.000	.584
523182 C	1.000	.677
523183 C	1.000	.575

Extraction Method: Principal Component Analysis.

a. Age groups = 40-50

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.661	16.656	16.656	8.661	16.656	16.656
2	6.342	12.197	28.853	6.342	12.197	28.853
3	4.828	9.285	38.138	4.828	9.285	38.138
4	2.939	5.651	43.789	2.939	5.651	43.789
5	2.841	5.463	49.251	2.841	5.463	49.251
6	2.401	4.617	53.869	2.401	4.617	53.869
7	2.223	4.275	58.143			
8	2.007	3.859	62.002			
9	1.817	3.494	65.496			
10	1.492	2.870	68.366			
11	1.355	2.605	70.971			
12	1.296	2.491	73.463			
13	1.207	2.321	75.783			
14	1.151	2.213	77.996			
15	.987	1.899	79.895			
16	.881	1.694	81.589			
17	.806	1.551	83.140			

18	.800	1.539	84.679				
19	.678	1.303	85.982				
20	.619	1.191	87.174				
21	.549	1.055	88.229				
22	.502	.965	89.193				
23	.495	.953	90.146				
24	.470	.903	91.049				
25	.451	.868	91.917				
26	.403	.775	92.692				
27	.384	.738	93.430				
28	.331	.637	94.067				
29	.301	.579	94.646				
30	.269	.516	95.163				
31	.245	.471	95.634				
32	.231	.444	96.077				
33	.215	.414	96.491				
34	.212	.408	96.900				
35	.178	.343	97.243				
36	.160	.307	97.550				
37	.148	.284	97.834				
38	.146	.280	98.114				
39	.135	.260	98.374				
40	.120	.231	98.605				
41	.105	.203	98.808				
42	.096	.185	98.993				
43	.093	.179	99.171				
44	.083	.160	99.331				
45	.069	.133	99.464				
46	.061	.117	99.581				
47	.047	.090	99.670				
48	.045	.087	99.758				
49	.040	.077	99.835				
50	.038	.073	99.907				
51	.026	.051	99.958				
52	.022	.042	100.000				

Extraction Method: Principal Component Analysis.

a. Age groups = 40-50

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
2312 S	.797					
5322 S	.737					
3313 S	.714					
8332 S	.709					
6323 S	.700					
9333 S	.698					
12343 S	.628					
11342 S	.618					
523182 C		.804				
513181 C		.757				
523183 C		.749				
463162 C		.703				
493172 C		.609				
453161 C		.601				
473163 C		.591				
413142 C		.573				-.449
443153 C		.511				
433151 C		.469			-.439	
423143 C		.467				-.467
25391 I			.759			
27393 I			.742			
26392 I			.682		-.412	
313111 I			.657			
22381 I			.609			
333113 I			.564			
323112 I			.558			
393133 C			.547			
373131 C			.503			
23382 I	.445		.488			
383132 C			.465			
353122 I			.442			
343121 I			.407			
15353 S				.756		
14352 S				.680		
18363 S				.641		
21373 I				.592		

13351 S				.575		
17362 S				.561		
503173 C				.541		
363123 I				-.429		
20372 I						
1311 S					.679	
10241 S					.648	
16361 S					.571	
7331 S					.553	
4312 S					.466	
303103 I						.652
303141 C						-.649
283101 I						.532
483171 C						-.520
24383 I						.461
293102 I						

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = 40-50

b. Rotation converged in 26 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
2312 S	.800					
3313 S	.763					
8332 S	.742					
5322 S	.736					
9333 S	.711					
6323 S	.706					
12343 S	.653					
11342 S	.635					
523182 C		.760				
523183 C		.729				
513181 C		.719				
463162 C		.713				
493172 C		.672				
453161 C		.642				
413142 C		.633				-.532
473163 C		.603				

443153 C		.564				
433151 C		.532			-.466	
27393 I			.749			
25391 I			.702			
26392 I			.698			
313111 I			.646			
333113 I			.640			
323112 I	.424		.612			
22381 I			.600			
23382 I	.513		.549			
393133 C			.547			
373131 C			.522			
353122 I			.518			
383132 C			.466			
363123 I			.450	-.430		.406
343121 I			.445			
15353 S				.782		
14352 S				.713		
18363 S				.643		
21373 I				.630		
13351 S				.589		
503173 C		.503		.560		-.415
17362 S				.548		
20372 I				.412		
1311 S					.720	
10241 S					.673	
16361 S					.609	
7331 S					.587	
4312 S					.482	
303103 I						.699
303141 C						-.659
283101 I						.573
483171 C		.439				-.571
423143 C		.545				-.551
24383 I			.480			.497
293102 I						

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

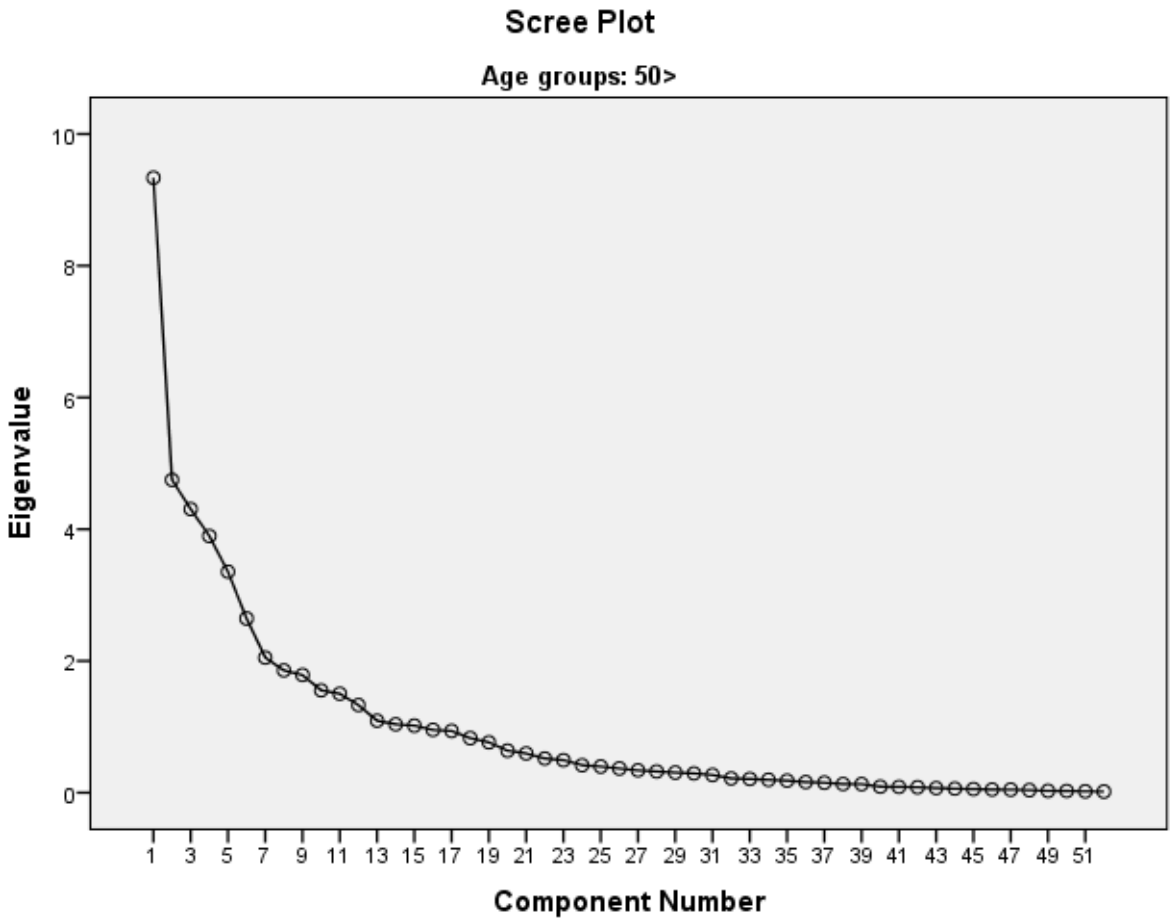
a. Age groups = 40-50

Over 50

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.556
Bartlett's Test of Sphericity	Approx. Chi-Square	3129.800
	df	1326
	Sig.	.000

a. Age groups = 50>



Communalities[a]

	Initial	Extraction
1311 S	1.000	.487
2312 S	1.000	.683
3313 S	1.000	.514
4312 S	1.000	.497
5322 S	1.000	.605
6323 S	1.000	.561
7331 S	1.000	.610
8332 S	1.000	.756
9333 S	1.000	.613
10241 S	1.000	.538
11342 S	1.000	.522
12343 S	1.000	.524
13351 S	1.000	.557
14352 S	1.000	.619
15353 S	1.000	.559
16361 S	1.000	.615
17362 S	1.000	.557
18363 S	1.000	.528
20372 I	1.000	.568
21373 I	1.000	.674
22381 I	1.000	.341
23382 I	1.000	.566
24383 I	1.000	.510
25391 I	1.000	.607
26392 I	1.000	.556
27393 I	1.000	.528
283101 I	1.000	.633
293102 I	1.000	.587
303103 I	1.000	.392
313111 I	1.000	.279
323112 I	1.000	.331
333113 I	1.000	.540
343121 I	1.000	.553
353122 I	1.000	.608
363123 I	1.000	.510
373131 C	1.000	.672
383132 C	1.000	.465
393133 C	1.000	.531

303141 C	1.000	.636
413142 C	1.000	.518
423143 C	1.000	.597
433151 C	1.000	.646
443153 C	1.000	.479
453161 C	1.000	.340
463162 C	1.000	.593
473163 C	1.000	.479
483171 C	1.000	.506
493172 C	1.000	.332
503173 C	1.000	.373
513181 C	1.000	.685
523182 C	1.000	.718
523183 C	1.000	.589

Extraction Method: Principal Component Analysis.

a. Age groups = 50>

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.335	17.952	17.952	9.335	17.952	17.952
2	4.749	9.133	27.085	4.749	9.133	27.085
3	4.305	8.279	35.364	4.305	8.279	35.364
4	3.898	7.495	42.860	3.898	7.495	42.860
5	3.355	6.452	49.311	3.355	6.452	49.311
6	2.645	5.086	54.397	2.645	5.086	54.397
7	2.051	3.943	58.341			
8	1.857	3.570	61.911			
9	1.786	3.435	65.346			
10	1.553	2.987	68.333			
11	1.502	2.889	71.223			
12	1.330	2.557	73.780			
13	1.093	2.102	75.882			
14	1.038	1.995	77.877			
15	1.018	1.958	79.835			
16	.953	1.833	81.667			
17	.938	1.804	83.471			

18	.828	1.592	85.063				
19	.764	1.470	86.533				
20	.638	1.227	87.760				
21	.595	1.145	88.905				
22	.520	.999	89.904				
23	.494	.951	90.854				
24	.417	.802	91.656				
25	.397	.763	92.419				
26	.368	.708	93.127				
27	.339	.652	93.779				
28	.322	.620	94.398				
29	.305	.586	94.985				
30	.293	.564	95.548				
31	.268	.516	96.065				
32	.216	.416	96.481				
33	.209	.402	96.883				
34	.196	.376	97.259				
35	.182	.350	97.609				
36	.160	.308	97.917				
37	.152	.292	98.209				
38	.132	.253	98.462				
39	.129	.249	98.711				
40	.091	.174	98.885				
41	.087	.167	99.052				
42	.083	.160	99.212				
43	.069	.133	99.344				
44	.061	.117	99.462				
45	.056	.108	99.569				
46	.048	.092	99.661				
47	.046	.088	99.749				
48	.039	.074	99.824				
49	.028	.054	99.878				
50	.026	.050	99.928				
51	.020	.039	99.967				
52	.017	.033	100.000				

Extraction Method: Principal Component Analysis.

a. Age groups = 50>

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
8332 S	.801					
2312 S	.743					
9333 S	.734					
12343 S	.695					
6323 S	.680					
5322 S	.662					
4312 S	.614					
3313 S	.583					
11342 S	.580					
7331 S	.525					-.437
513181 C	.503				-.469	
1311 S	.467					
433151 C		.742				
303141 C		.739				
373131 C		-.706				
413142 C		.682				
423143 C		.614				
443153 C		.524				
393133 C		-.457				
383132 C		-.435				
503173 C		.418				
14352 S			.721			
15353 S			.714			
17362 S			.676			
20372 I			.674			
21373 I			.639		-.425	
18363 S			.554			
25391 I				-.714		
27393 I				-.676		
353122 I				-.672		
26392 I				-.639		
343121 I				-.617		
24383 I				-.612		
363123 I				-.565		
23382 I				-.542		
283101 I				-.536		-.437
313111 I				-.489		

333113 I				-.448	.441	
303103 I				-.448		
22381 I				-.446		
323112 I				-.416		
523182 C					-.773	
463162 C					-.743	
523183 C					-.714	
473163 C					-.624	
453161 C					-.545	
16361 S						-.721
10241 S						-.610
483171 C						.571
293102 I				-.496		-.546
13351 S			.421			-.545
493172 C						

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = 50>

b. Rotation converged in 36 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
8332 S	.840					
9333 S	.757					
2312 S	.729					
6323 S	.715					
12343 S	.699					
5322 S	.696					
4312 S	.633					
3313 S	.627					
11342 S	.601					
7331 S	.590					-.508
1311 S	.501					
433151 C		.761				
303141 C		.752				
373131 C		-.706				
413142 C		.695				

423143 C		.640				
443153 C		.558				
393133 C		-.479		-.431		
503173 C		.461				.404
383132 C		-.432				
15353 S			.726			
14352 S			.723			
17362 S			.700			
20372 I			.630			
21373 I			.606		-.411	
18363 S			.588			
353122 I				-.719		
27393 I				-.667		
25391 I				-.651		
343121 I				-.649		
24383 I				-.639		
26392 I				-.624		
363123 I				-.611		
23382 I	.448			-.587		
283101 I				-.565		-.487
333113 I				-.494	.467	
22381 I				-.490		
323112 I				-.474		
303103 I				-.472		
313111 I				-.470		
523182 C					-.771	
463162 C					-.732	
523183 C					-.725	
473163 C					-.625	
453161 C					-.556	
513181 C		.401			-.465	
16361 S						-.743
10241 S						-.652
483171 C		.411				.592
13351 S			.467			-.585
293102 I				-.518		-.564
493172 C						.401

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Age groups = 50>

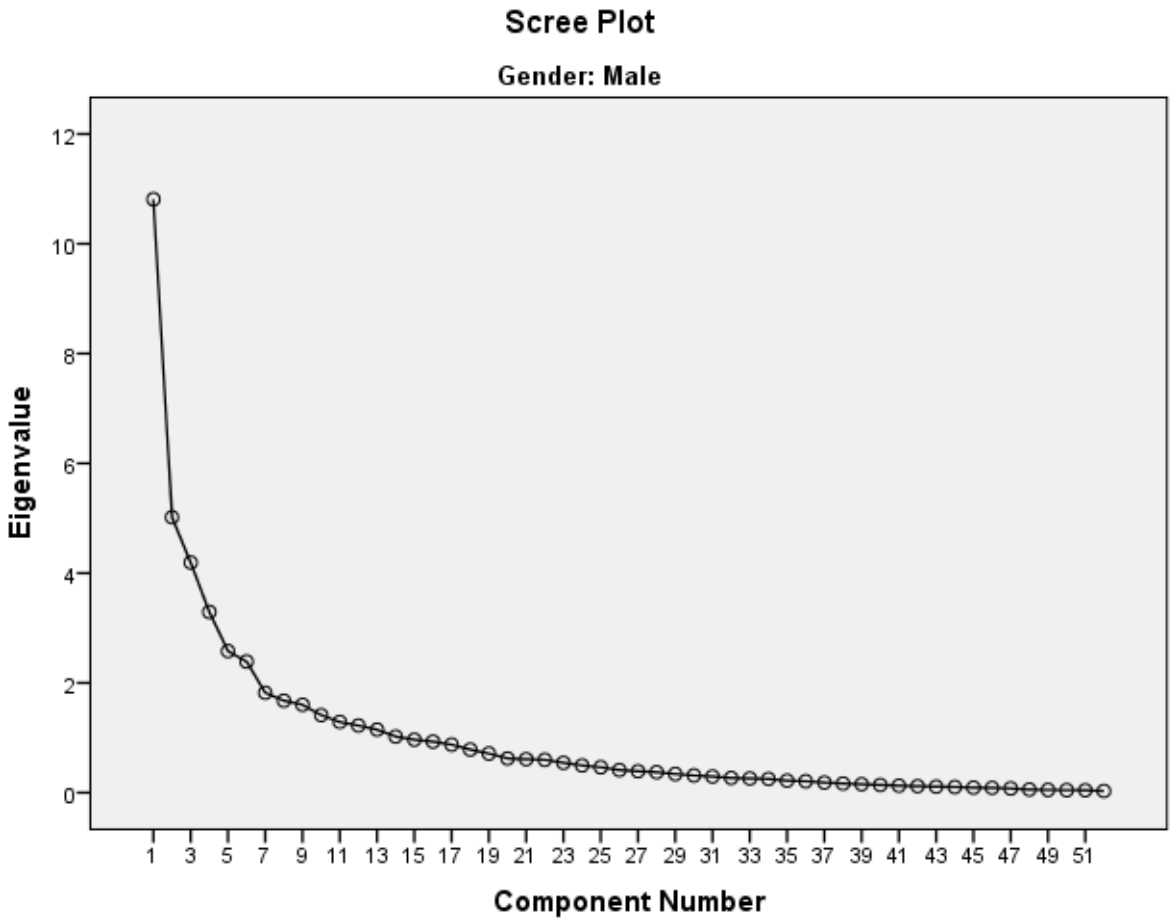
Gender

Males

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.664
Bartlett's Test of Sphericity	Approx. Chi-Square	4382.788
	df	1326
	Sig.	.000

a. Gender = Male



Communalities[a]

	Initial	Extraction
1311 S	1.000	.540
2312 S	1.000	.736
3313 S	1.000	.691
4312 S	1.000	.465
5322 S	1.000	.676
6323 S	1.000	.706
7331 S	1.000	.595
8332 S	1.000	.671
9333 S	1.000	.594
10241 S	1.000	.600
11342 S	1.000	.618
12343 S	1.000	.563
13351 S	1.000	.401
14352 S	1.000	.618
15353 S	1.000	.686
16361 S	1.000	.501
17362 S	1.000	.496
18363 S	1.000	.451
20372 I	1.000	.550
21373 I	1.000	.397
22381 I	1.000	.507
23382 I	1.000	.538
24383 I	1.000	.574
25391 I	1.000	.652
26392 I	1.000	.591
27393 I	1.000	.462
283101 I	1.000	.471
293102 I	1.000	.533
303103 I	1.000	.528
313111 I	1.000	.315
323112 I	1.000	.551
333113 I	1.000	.538
343121 I	1.000	.457
353122 I	1.000	.544
363123 I	1.000	.389
373131 C	1.000	.535
383132 C	1.000	.288

393133 C	1.000	.467
303141 C	1.000	.612
413142 C	1.000	.386
423143 C	1.000	.579
433151 C	1.000	.677
443153 C	1.000	.546
453161 C	1.000	.461
463162 C	1.000	.648
473163 C	1.000	.476
483171 C	1.000	.499
493172 C	1.000	.538
503173 C	1.000	.564
513181 C	1.000	.570
523182 C	1.000	.676
523183 C	1.000	.552

Extraction Method: Principal Component Analysis.

a. Gender = Male

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.810	20.788	20.788	10.810	20.788	20.788
2	5.017	9.648	30.436	5.017	9.648	30.436
3	4.193	8.064	38.500	4.193	8.064	38.500
4	3.292	6.330	44.830	3.292	6.330	44.830
5	2.579	4.959	49.789	2.579	4.959	49.789
6	2.388	4.592	54.381	2.388	4.592	54.381
7	1.820	3.501	57.882			
8	1.676	3.222	61.104			
9	1.602	3.081	64.185			
10	1.414	2.718	66.903			
11	1.288	2.477	69.381			
12	1.223	2.351	71.732			
13	1.149	2.210	73.942			
14	1.023	1.967	75.909			
15	.966	1.858	77.767			
16	.931	1.790	79.557			

17	.876	1.684	81.241				
18	.785	1.510	82.750				
19	.713	1.371	84.122				
20	.624	1.200	85.322				
21	.611	1.174	86.496				
22	.598	1.151	87.647				
23	.545	1.048	88.695				
24	.497	.956	89.650				
25	.462	.889	90.539				
26	.412	.793	91.332				
27	.391	.752	92.084				
28	.372	.716	92.800				
29	.340	.653	93.453				
30	.314	.604	94.057				
31	.295	.567	94.625				
32	.269	.517	95.141				
33	.259	.497	95.639				
34	.251	.482	96.121				
35	.219	.420	96.541				
36	.208	.400	96.941				
37	.185	.357	97.298				
38	.166	.319	97.616				
39	.155	.298	97.914				
40	.142	.272	98.187				
41	.129	.247	98.434				
42	.119	.229	98.664				
43	.109	.210	98.874				
44	.103	.198	99.072				
45	.091	.175	99.247				
46	.087	.167	99.415				
47	.076	.147	99.561				
48	.057	.111	99.672				
49	.050	.097	99.769				
50	.046	.088	99.857				
51	.045	.086	99.943				
52	.029	.057	100.000				

Extraction Method: Principal Component Analysis.

a. Gender = Male

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
2312 S	.853					
6323 S	.835					
5322 S	.797					
9333 S	.680					
8332 S	.666					
3313 S	.632					
11342 S	.509				.485	
12343 S	.461				.453	
4312 S	.444				.424	
463162 C		.769				
523182 C		.733				
523183 C		.673				
473163 C		.658				
453161 C		.652				
513181 C		.615				
493172 C		.587				
25391 I			.780			
26392 I			.724			
27393 I			.698			
24383 I			.666			
22381 I			.665			
23382 I			.659			
333113 I			.644			
293102 I			.557			
323112 I			.551			
393133 C			.542			
303103 I			.540			
363123 I			.513			
313111 I			.510			
353122 I			.508			
283101 I			.468			
343121 I			.443			
383132 C						
15353 S				.777		
14352 S				.732		
17362 S				.608		

20372 I				.522		
18363 S				.507		
21373 I				.473		
13351 S				.454		
10241 S					.670	
7331 S					.641	
16361 S					.624	
483171 C		.400			-.505	
503173 C					-.486	
1311 S					.479	
303141 C						.727
433151 C						.681
423143 C						.673
373131 C						-.596
443153 C						.589
413142 C						.470

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Gender = Male

b. Rotation converged in 27 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
2312 S	.843					
6323 S	.833					
5322 S	.792					
8332 S	.757				.440	
3313 S	.737				.482	
9333 S	.728					
11342 S	.615				.597	
12343 S	.583				.562	
4312 S	.528				.504	
463162 C		.761				
523182 C		.732				
523183 C		.687				
453161 C		.665				
473163 C		.641				

493172 C		.631				
513181 C		.614				
26392 I			.708			
25391 I			.693			
23382 I			.692			
24383 I			.687			
333113 I			.683			
27393 I			.673			
22381 I			.671			
303103 I			.601		.468	
293102 I			.585		.444	
323112 I			.583			
393133 C			.575			
363123 I			.557			
353122 I	.420		.552			
313111 I			.531			
283101 I			.521	.405		
343121 I			.505			-.414
383132 C						
15353 S				.777		
14352 S				.752		
17362 S				.613		
20372 I		.411		.536		
18363 S				.536		
13351 S				.480		
21373 I				.466		
10241 S					.722	
7331 S					.708	
16361 S					.653	
1311 S	.498				.580	
483171 C		.476			-.555	
503173 C		.455			-.526	
303141 C						.727
433151 C						.725
423143 C						.701
443153 C						.629
373131 C						-.616
413142 C						.521

Extraction Method: Principal Component Analysis.

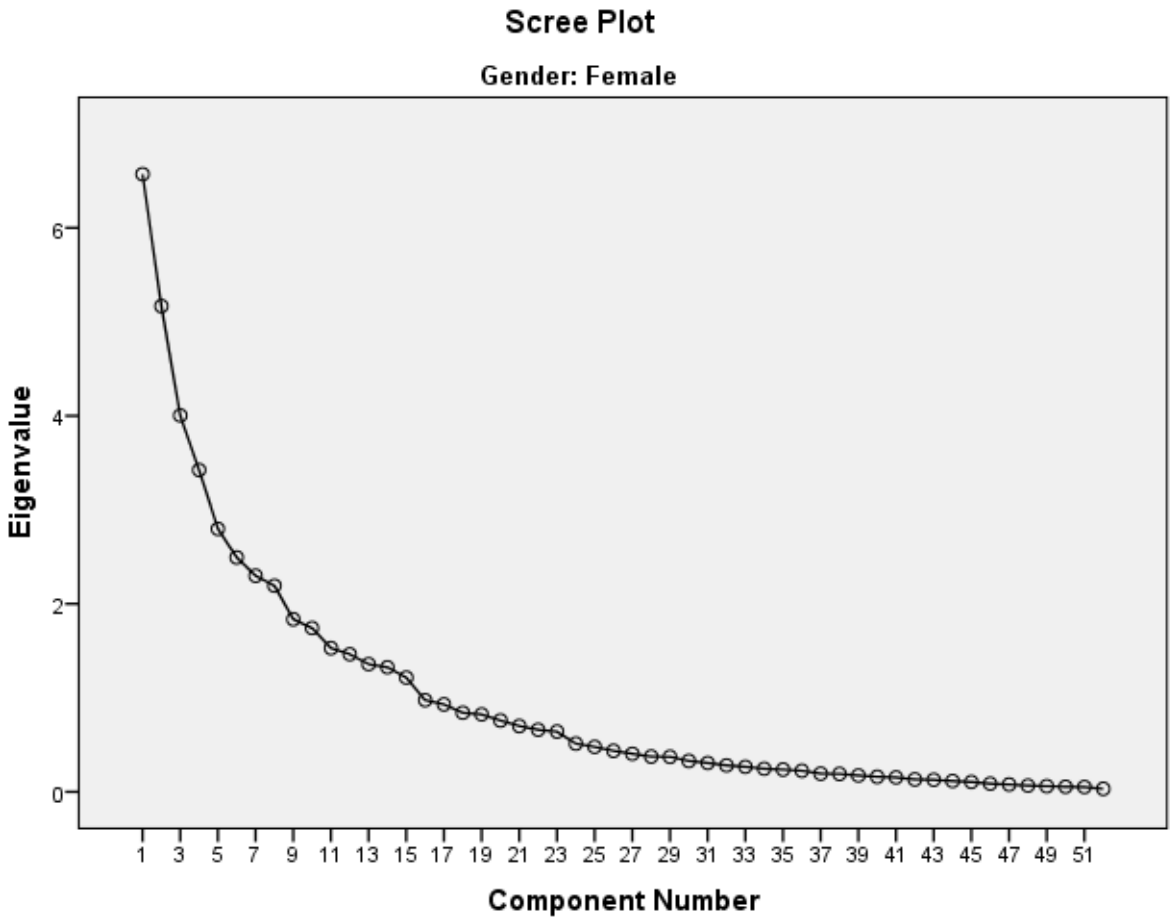
Rotation Method: Oblimin with Kaiser Normalization.

FEMALES

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.564
Bartlett's Test of Sphericity	Approx. Chi-Square	3514.921
	df	1326
	Sig.	.000

a. Gender = Female



Communalities[a]

	Initial	Extraction
1311 S	1.000	.527
2312 S	1.000	.530
3313 S	1.000	.575
4312 S	1.000	.392
5322 S	1.000	.581
6323 S	1.000	.487
7331 S	1.000	.365
8332 S	1.000	.618
9333 S	1.000	.746
10241 S	1.000	.338
11342 S	1.000	.334
12343 S	1.000	.556
13351 S	1.000	.432
14352 S	1.000	.418
15353 S	1.000	.326
16361 S	1.000	.425
17362 S	1.000	.331
18363 S	1.000	.481
20372 I	1.000	.315
21373 I	1.000	.381
22381 I	1.000	.408
23382 I	1.000	.667
24383 I	1.000	.376
25391 I	1.000	.481
26392 I	1.000	.510
27393 I	1.000	.488
283101 I	1.000	.558
293102 I	1.000	.387
303103 I	1.000	.263
313111 I	1.000	.645
323112 I	1.000	.583
333113 I	1.000	.553
343121 I	1.000	.363
353122 I	1.000	.483
363123 I	1.000	.424
373131 C	1.000	.471
383132 C	1.000	.171
393133 C	1.000	.372

303141 C	1.000	.562
413142 C	1.000	.549
423143 C	1.000	.587
433151 C	1.000	.514
443153 C	1.000	.455
453161 C	1.000	.304
463162 C	1.000	.411
473163 C	1.000	.360
483171 C	1.000	.517
493172 C	1.000	.515
503173 C	1.000	.451
513181 C	1.000	.647
523182 C	1.000	.549
523183 C	1.000	.679

Extraction Method: Principal Component Analysis.

a. Gender = Female

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.571	12.637	12.637	6.571	12.637	12.637
2	5.167	9.937	22.574	5.167	9.937	22.574
3	4.004	7.700	30.274	4.004	7.700	30.274
4	3.424	6.585	36.859	3.424	6.585	36.859
5	2.798	5.380	42.239	2.798	5.380	42.239
6	2.493	4.795	47.034	2.493	4.795	47.034
7	2.299	4.421	51.455			
8	2.194	4.218	55.674			
9	1.836	3.531	59.204			
10	1.742	3.350	62.554			
11	1.529	2.941	65.495			
12	1.464	2.815	68.310			
13	1.358	2.612	70.922			
14	1.325	2.549	73.471			
15	1.215	2.337	75.808			
16	.976	1.877	77.684			
17	.930	1.789	79.473			

18	.841	1.617	81.091				
19	.823	1.584	82.674				
20	.759	1.459	84.133				
21	.700	1.347	85.480				
22	.660	1.270	86.749				
23	.641	1.232	87.982				
24	.513	.987	88.968				
25	.478	.919	89.887				
26	.436	.839	90.726				
27	.404	.778	91.504				
28	.375	.722	92.226				
29	.373	.717	92.943				
30	.329	.633	93.575				
31	.308	.592	94.167				
32	.281	.540	94.707				
33	.267	.513	95.220				
34	.246	.474	95.694				
35	.236	.455	96.148				
36	.224	.431	96.579				
37	.194	.372	96.952				
38	.191	.367	97.318				
39	.174	.334	97.652				
40	.160	.307	97.959				
41	.153	.294	98.254				
42	.132	.254	98.508				
43	.128	.247	98.755				
44	.115	.220	98.975				
45	.105	.202	99.177				
46	.086	.166	99.343				
47	.078	.151	99.494				
48	.066	.127	99.621				
49	.060	.115	99.736				
50	.054	.104	99.840				
51	.052	.099	99.939				
52	.032	.061	100.000				

Extraction Method: Principal Component Analysis.

a. Gender = Female

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
9333 S	.885					
3313 S	.766					
12343 S	.741					
6323 S	.669					
8332 S	.636					
5322 S	.515					-.473
11342 S	.453					
383132 C						
523183 C		.817				
523182 C		.731				
513181 C		.700				
443153 C		.513				
26392 I		.448				
293102 I		.419				
21373 I			.587			
18363 S			.574			
14352 S			.557			
15353 S			.539			
17362 S			.504			
27393 I			-.487			
363123 I			-.462			
333113 I			-.453			
24383 I						
303103 I						
313111 I				.753		
25391 I				.599		
343121 I				.575		
373131 C				.554		
22381 I				.540		
283101 I				.538	.444	
393133 C				.462		
10241 S						
303141 C					-.702	
483171 C					-.662	
433151 C					-.585	
413142 C					-.559	

16361 S					.512	
503173 C					-.467	
2312 S	.414				-.438	
13351 S					.416	
7331 S					.408	
493172 C						
423143 C						
453161 C						
1311 S						-.651
23382 I						-.587
4312 S						-.528
323112 I						-.456
463162 C		.435				.452
353122 I						-.415
473163 C						
20372 I						

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Gender = Female

b. Rotation converged in 38 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
9333 S	.835					
3313 S	.741					
12343 S	.691					
8332 S	.685					-.475
6323 S	.671					
5322 S	.575					-.557
11342 S	.489					
2312 S	.446					-.439
383132 C						
523183 C		.817				
523182 C		.732				
513181 C		.702				
443153 C		.545				
26392 I		.497	-.418			
293102 I		.401				

21373 I			.597			
14352 S			.551			
18363 S			.541			
15353 S			.524			
27393 I			-.507	.410		
363123 I			-.486			
333113 I			-.482	.425		
17362 S			.474			
24383 I			-.432			
303103 I						
313111 I				.730		
343121 I				.575		
25391 I				.573		
373131 C				.564		
283101 I				.553	.420	
22381 I				.519		
393133 C				.469		
10241 S						
303141 C					-.716	
483171 C					-.654	
433151 C					-.611	
413142 C					-.606	
16361 S					.497	
503173 C					-.491	
423143 C		.423			-.461	
493172 C					-.424	
453161 C					-.423	
7331 S					.419	
13351 S					.410	
1311 S						-.631
23382 I						-.602
323112 I				.423		-.529
4312 S						-.508
353122 I						-.463
463162 C		.436				.457
473163 C						.421
20372 I						

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

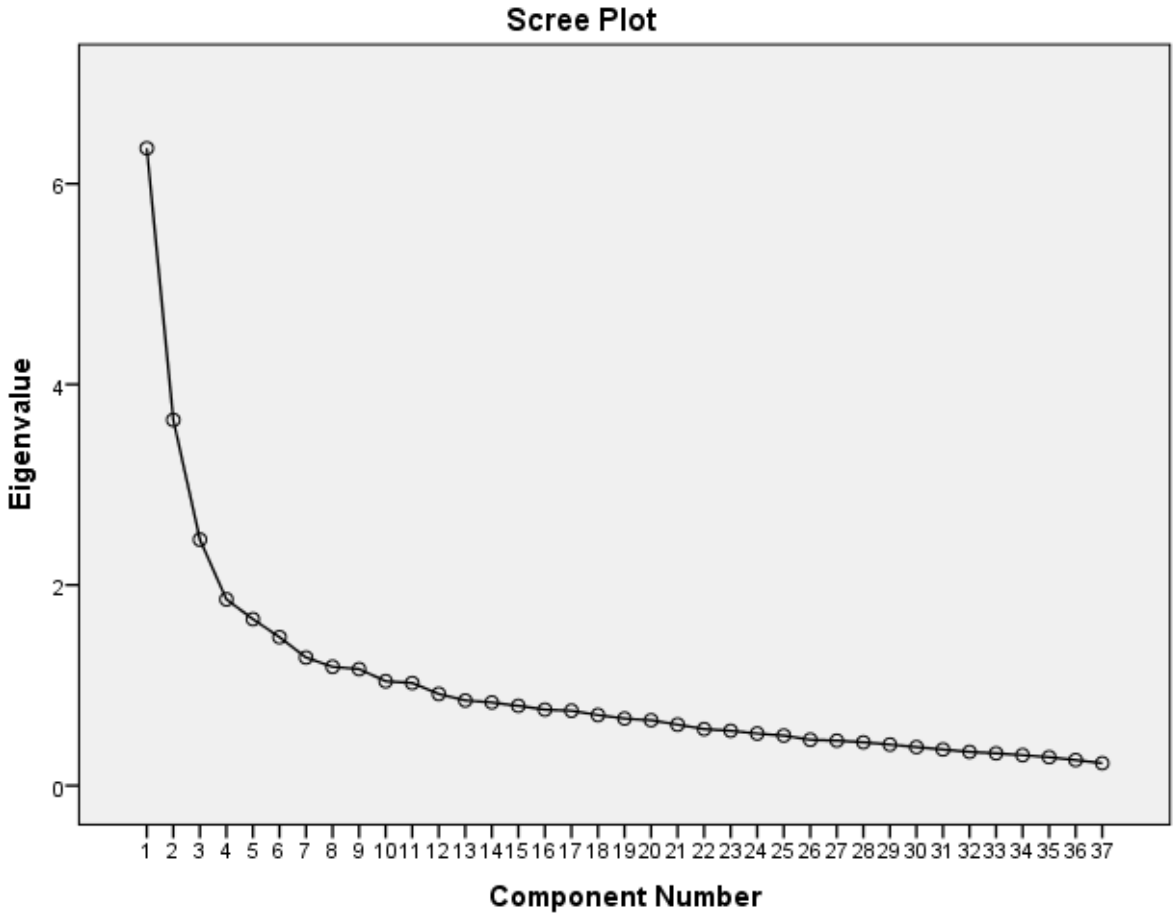
a. Gender = Female

APPENDIX 5 PRINCIPAL COMPONENT ANALYSIS WAYS OF COPING (WCQ) DATA

ALL PARTICIPANTS

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.794
Bartlett's Test of Sphericity	Approx. Chi-Square	2492.242
	df	666
	Sig.	.000



Communalities

	Initial	Extraction
37tried to get change mind	1.000	.562
48talked to someone	1.000	.536
59crticised self	1.000	.461
610left open	1.000	.468
711hoped for miracle	1.000	.473
812went with fate	1.000	.437
1115look on bright side	1.000	.368
1317expressed anger at person	1.000	.605
1418accepted sympathy	1.000	.517
1520inspired to be creative	1.000	.466
1621tried to forget	1.000	.527
1722got professional help	1.000	.445
1823changed as person good	1.000	.567
1925apologised ort made up	1.000	.377
2128let my feelings out	1.000	.407
2229realised I caused problem	1.000	.430
2330came out positively	1.000	.588
2431talked to person who could do	1.000	.431
2533self medicated food etc	1.000	.383
2735tried to not act hastily	1.000	.321
2938rediscovered import in life	1.000	.530
2836found new faith	1.000	.532
3140avoided people	1.000	.380
3241refused to think about it	1.000	.390
3342asked respected friend for advice	1.000	.526
3544made light of it	1.000	.346
3645talked to someone about feelings	1.000	.709
3746stood ground and fought	1.000	.523
3847took it out on others	1.000	.326
3948drew on past experience	1.000	.392
4251promised self different next time	1.000	.495
4352came up diff solutions	1.000	.504
4556changed self	1.000	.525
4658wished sit would go away	1.000	.505
4759fantisized about how it turn out	1.000	.539
4860prayed	1.000	.441
4963though how admired person handle it	1.000	.417

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.354	17.174	17.174	6.354	17.174	17.174
2	3.646	9.854	27.028	3.646	9.854	27.028
3	2.453	6.629	33.657	2.453	6.629	33.657
4	1.857	5.019	38.676	1.857	5.019	38.676
5	1.659	4.485	43.161	1.659	4.485	43.161
6	1.481	4.002	47.162	1.481	4.002	47.162
7	1.277	3.451	50.614			
8	1.184	3.201	53.814			
9	1.161	3.139	56.953			
10	1.041	2.813	59.766			
11	1.024	2.766	62.533			
12	.914	2.471	65.003			
13	.849	2.295	67.298			
14	.829	2.240	69.537			
15	.795	2.149	71.687			
16	.758	2.048	73.734			
17	.747	2.018	75.752			
18	.703	1.901	77.653			
19	.669	1.807	79.460			
20	.652	1.761	81.221			
21	.607	1.642	82.863			
22	.563	1.521	84.384			
23	.547	1.478	85.862			
24	.519	1.402	87.265			
25	.499	1.350	88.614			
26	.457	1.234	89.849			
27	.448	1.210	91.059			
28	.432	1.169	92.228			
29	.409	1.105	93.333			
30	.384	1.037	94.370			
31	.360	.972	95.342			
32	.336	.908	96.250			
33	.322	.870	97.121			
34	.304	.822	97.942			
35	.283	.765	98.707			
36	.255	.688	99.396			
37	.224	.604	100.000			

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a]

	Component					
	1	2	3	4	5	6
2330came out positively	.772					
1823changed as person good	.715					
2938rediscovered import in life	.685					
4556changed self	.654					
4251promised self different next time	.451					
1520inspired to be creative						
4658wished sit would go away		.680				
4759fantisized about how it turn out		.653				
3140avoided people		.598				
2533self medicated food etc		.592				
59crticised self		.538				
711hoped for miracle		.538				
812went with fate		.538				
3847took it out on others		.462				
2229realised I caused problem		.410				
3645talked to someone about feelings			-.801			
3342asked respected friend for advice			-.657			
1418accepted sympathy			-.640			
48talked to someone			-.589			
1722got professional help			-.497			
2128let my feelings out			-.412			
37tried to get change mind				.743		
1317expressed anger at person				.597		
3746stood ground and fought				.531		
1925apologised ort made up						
2836found new faith				-.418	.610	
4860prayed					.592	
3241refused to think about it					.518	
1621tried to forget					.508	
3544made light of it					.488	
4963though how admired person handle it					.452	
1115look on bright side					.433	
610left open						.651

2735tried to not act hastily						.548
4352came up diff solutions	.401					.520
3948drew on past experience						.511
2431talked to person who could do						.408

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 20 iterations.

Structure Matrix

	Component					
	1	2	3	4	5	6
2330came out positively	.742					
1823changed as person good	.733					
4556changed self	.690					
2938rediscovered import in life	.684					
4251promised self different next time	.515	.414				
1520inspired to be creative	.509					.481
4658wished sit would go away		.694				
4759fantisized about how it turn out		.669				
2533self medicated food etc		.587				
59crticised self		.582				
711hoped for miracle		.573				
812went with fate		.560				
3140avoided people		.554				
3847took it out on others		.496				
2229realised I caused problem		.411				
3645talked to someone about feelings			-.825			
3342asked respected friend for advice			-.688			
1418accepted sympathy			-.668			
48talked to someone			-.629			.421
1722got professional help			-.523			
2128let my feelings out			-.464	.409		
37tried to get change mind				.737		
1317expressed anger at person		.429		.617		
3746stood ground and fought				.571		
1925apologised ort made up				.450		.445
4860prayed					.606	
2836found new faith					.587	

1621tried to forget				.452	.545	
4963though how admired person handle it					.528	
3544made light of it					.517	
3241refused to think about it					.507	
1115look on bright side					.497	
610left open						.613
4352came up diff solutions	.489					.593
3948drew on past experience						.568
2735tried to not act hastily						.559
2431talked to person who could do			-.466			.493

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

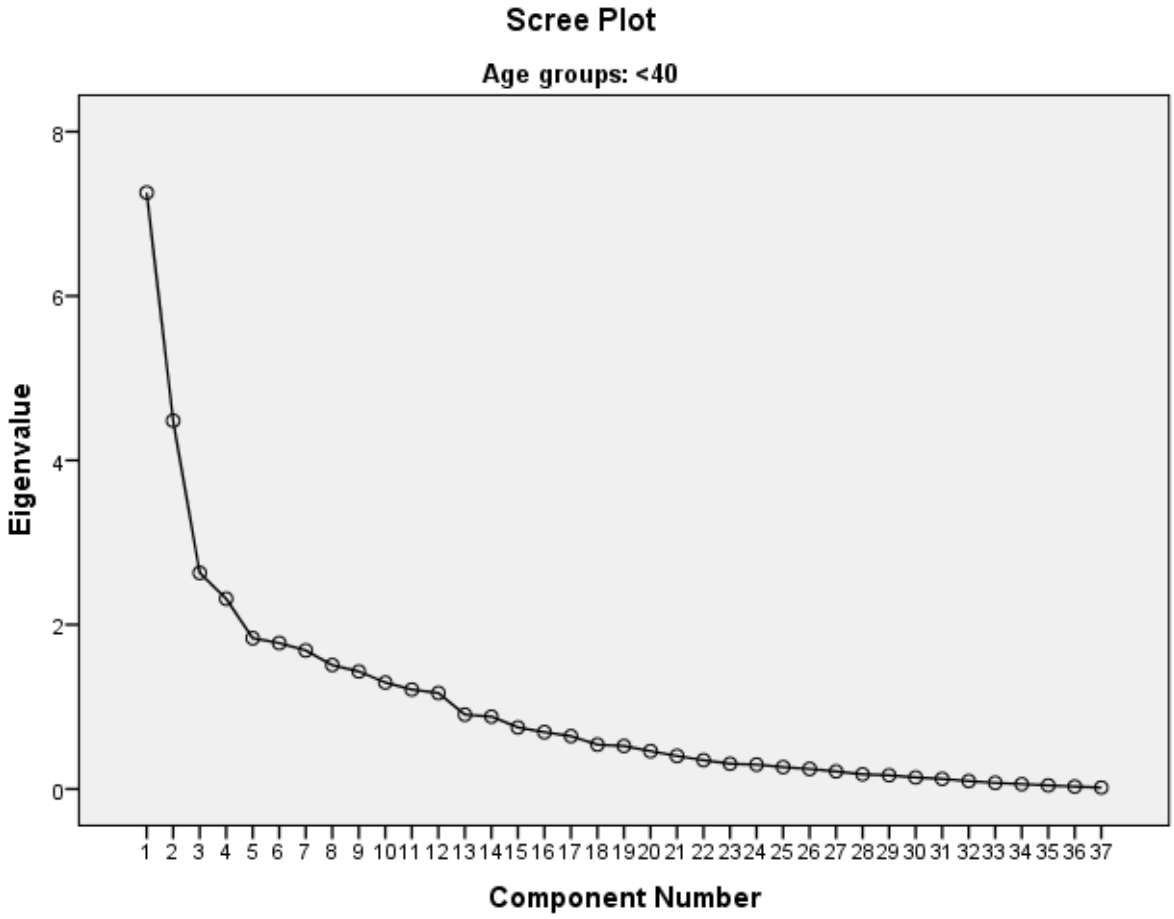
AGE ANALYSIS

AGE BELOW 40

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.423
Bartlett's Test of Sphericity	Approx. Chi-Square	1034.189
	df	666
	Sig.	.000

a. Age groups = <40



Communalities[a]

	Initial	Extraction
37tried to get change mind	1.000	.406
48talked to someone	1.000	.649
59crticised self	1.000	.583
610left open	1.000	.582
711hoped for miracle	1.000	.598
812went with fate	1.000	.610
1115look on bright side	1.000	.484
1317expressed anger at person	1.000	.762
1418accepted sympathy	1.000	.579
1520inspired to be creative	1.000	.551
1621tried to forget	1.000	.661
1722got professional help	1.000	.465
1823changed as person good	1.000	.495
1925apologised ort made up	1.000	.323
2128let my feelings out	1.000	.739
2229realised i caused problem	1.000	.501
2330came out positively	1.000	.700
2431talked to person who could do	1.000	.404
2533self medicated food etc	1.000	.600
2735tried to not act hastily	1.000	.539
2938rediscovered import in life	1.000	.597
2836found new faith	1.000	.476
3140avoided people	1.000	.484
3241refused to think about it	1.000	.565
3342asked respected friend for advice	1.000	.687
3544made light of it	1.000	.251
3645talked to someone about feelings	1.000	.636
3746stood ground and fought	1.000	.320
3847took it out on others	1.000	.499
3948drew on past experience	1.000	.327
4251promised self different next time	1.000	.758
4352came up diff solutions	1.000	.495
4556changed self	1.000	.702

4658wished sit would go away	1.000	.588
4759fantisized about how it turn out	1.000	.615
4860prayed	1.000	.693
4963though how admired person handle it	1.000	.375

Extraction Method: Principal Component Analysis.

a. Age groups = <40

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.259	19.618	19.618	7.259	19.618	19.618
2	4.482	12.114	31.732	4.482	12.114	31.732
3	2.630	7.109	38.841	2.630	7.109	38.841
4	2.315	6.257	45.098	2.315	6.257	45.098
5	1.835	4.961	50.058	1.835	4.961	50.058
6	1.777	4.802	54.860	1.777	4.802	54.860
7	1.686	4.557	59.418			
8	1.508	4.077	63.494			
9	1.430	3.865	67.359			
10	1.295	3.501	70.861			
11	1.210	3.271	74.131			
12	1.169	3.159	77.290			
13	.905	2.445	79.736			
14	.881	2.381	82.117			
15	.749	2.025	84.142			
16	.692	1.869	86.011			
17	.643	1.739	87.750			
18	.539	1.457	89.207			
19	.523	1.414	90.621			
20	.460	1.244	91.865			
21	.402	1.087	92.952			
22	.350	.947	93.898			
23	.306	.828	94.727			
24	.297	.803	95.530			
25	.267	.720	96.250			
26	.245	.661	96.911			
27	.214	.579	97.490			
28	.178	.481	97.971			

29	.167	.452	98.423				
30	.140	.378	98.801				
31	.123	.333	99.134				
32	.096	.259	99.393				
33	.075	.203	99.596				
34	.060	.161	99.757				
35	.043	.116	99.873				
36	.030	.082	99.955				
37	.017	.045	100.000				

Extraction Method: Principal Component Analysis.

a. Age groups = <40

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
1317expressed anger at person	.834					
711hoped for miracle	.744					
4658wished sit would go away	.741					
4759fantisized about how it turn out	.703					
812went with fate	.694					
59crticised self	.683					
4251promised self different next time	.562					
3140avoided people	.516		-.475			
37tried to get change mind	.505					
2229realised I caused problem	.414					
2330came out positively		.836				
1520inspired to be creative		.681				
1823changed as person good		.564				
2431talked to person who could do		.419				
4963though how admired person handle it						
3746stood ground and fought						
2836found new faith			.664			
3241refused to think about it			.624			
4860prayed				-.759		
610left open				.721		
2938rediscovered import in life				-.638		
1621tried to forget				-.597		

4556changed self		.488		-.488		
3645talked to someone about feelings					.734	
1418accepted sympathy					.684	
3342asked respected friend for advice		.446			.627	
48talked to someone				.485	.555	
1722got professional help					.474	
1115look on bright side					-.434	
3847took it out on others						.598
2735tried to not act hastily						-.584
3948drew on past experience						-.553
2128let my feelings out					.489	-.502
1925apologised ort made up						-.427
4352came up diff solutions		.401				-.415
2533self medicated food etc						.414
3544made light of it						

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a,b]

a. Age groups = <40

b. Rotation converged in 36 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
1317expressed anger at person	.844					
4658wished sit would go away	.755					
4759fantisized about how it turn out	.726					
59crticised self	.721					
711hoped for miracle	.677					
812went with fate	.672					
4251promised self different next time	.668	.490				-.433
37tried to get change mind	.553					
3140avoided people	.491		-.476			
2229realised i caused problem	.481	.401				
2330came out positively		.798				
1520inspired to be creative		.671				
4556changed self	.418	.581		-.541		
1823changed as person good	.437	.560				
2431talked to person who could do		.494				

4963though how admired person handle it		.444				
3746stood ground and fought		.403				
2836found new faith			.654			
3241refused to think about it			.650			
4860prayed				-.745		
2938rediscovered import in life				-.683		
610left open				.679		
1621tried to forget	.468			-.656		
3645talked to someone about feelings					.766	
3342asked respected friend for advice		.512			.690	
1418accepted sympathy					.677	
48talked to someone				.482	.591	
2128let my feelings out	.412				.555	-.547
1722got professional help					.471	
1115look on bright side						
2735tried to not act hastily						-.580
3948drew on past experience						-.559
3847took it out on others						.543
4352came up diff solutions		.495				-.515
1925apologised ort made up						-.487
2533self medicated food etc						.452
3544made light of it						-.405

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a]

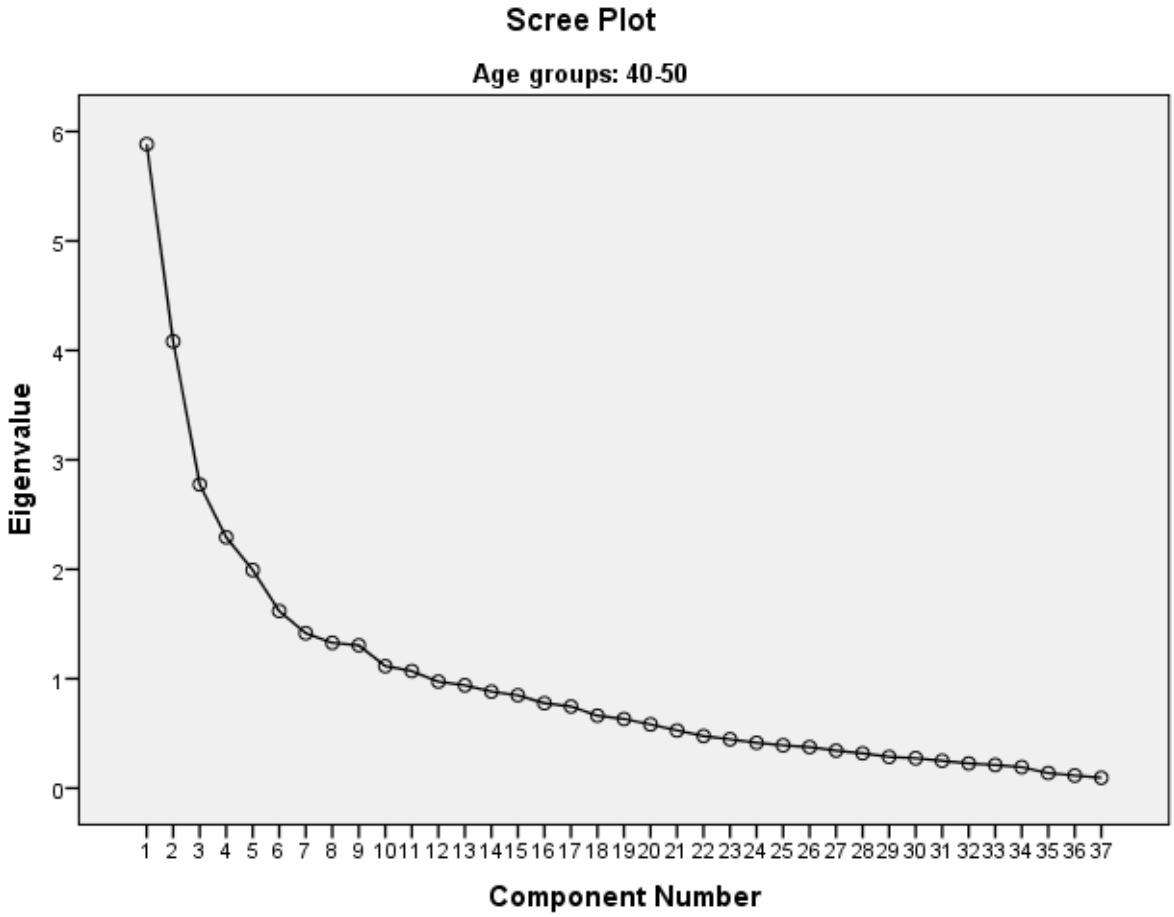
a. Age groups = <40

40 – 50

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.625
Bartlett's Test of Sphericity	Approx. Chi-Square	1387.882
	df	666
	Sig.	.000

a. Age groups = 40-50



Communalities[a]

	Initial	Extraction
37tried to get change mind	1.000	.522
48talked to someone	1.000	.660
59crticised self	1.000	.406
610left open	1.000	.633
711hoped fr miracle	1.000	.341
812went with fate	1.000	.505
1115look on bright side	1.000	.484
1317expressed anger at person	1.000	.453
1418accepted sympathy	1.000	.479
1520inspired to be creative	1.000	.510
1621tried to forget	1.000	.601
1722got professional help	1.000	.484
1823changed as person good	1.000	.678
1925apologised ort made up	1.000	.565
2128let my feelings out	1.000	.390
2229realised I caused problem	1.000	.448
2330came out positively	1.000	.580
2431talked to person who could do	1.000	.540
2533self medicated food etc	1.000	.574
2735tried to not act hastily	1.000	.274
2938rediscovered import in life	1.000	.534
2836found new faith	1.000	.523
3140avoided people	1.000	.524
3241refused to think about it	1.000	.441
3342asked respected friend for advice	1.000	.496
3544made light of it	1.000	.417
3645talked to someone about feelings	1.000	.776
3746stood ground and fought	1.000	.636
3847took it out on others	1.000	.369
3948drew on past experience	1.000	.364
4251promised self different next time	1.000	.501
4352came up diff solutions	1.000	.515
4556changed self	1.000	.554

4658wished sit would go away	1.000	.523
4759fantisized about how it turn out	1.000	.481
4860prayed	1.000	.413
4963though how admired person handle it	1.000	.449

Extraction Method: Principal Component Analysis.

a. Age groups = 40-50

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.884	15.903	15.903	5.884	15.903	15.903
2	4.083	11.034	26.937	4.083	11.034	26.937
3	2.775	7.500	34.437	2.775	7.500	34.437
4	2.292	6.196	40.632	2.292	6.196	40.632
5	1.992	5.385	46.017	1.992	5.385	46.017
6	1.618	4.373	50.390	1.618	4.373	50.390
7	1.416	3.827	54.217			
8	1.328	3.588	57.805			
9	1.305	3.527	61.332			
10	1.115	3.013	64.345			
11	1.070	2.892	67.237			
12	.973	2.630	69.867			
13	.939	2.539	72.407			
14	.882	2.385	74.791			
15	.848	2.293	77.084			
16	.776	2.098	79.182			
17	.746	2.016	81.198			
18	.662	1.790	82.988			
19	.632	1.709	84.697			
20	.582	1.573	86.270			
21	.527	1.425	87.695			
22	.476	1.287	88.981			
23	.446	1.206	90.188			
24	.415	1.122	91.310			
25	.392	1.059	92.368			

26	.376	1.015	93.383				
27	.343	.926	94.310				
28	.318	.860	95.170				
29	.286	.773	95.942				
30	.273	.738	96.681				
31	.250	.675	97.356				
32	.226	.611	97.967				
33	.212	.572	98.540				
34	.192	.519	99.059				
35	.138	.372	99.431				
36	.115	.312	99.743				
37	.095	.257	100.000				

Extraction Method: Principal Component Analysis.

a. Age groups = 40-50

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
3645talked to someone about feelings	.759					
48talked to someone	.654					
3342asked respected friend for advice	.641					
1418accepted sympathy	.463					
2128let my feelings out						
1722got professional help						
2229realised i caused problem						
2533self medicated food etc		.735				
4658wished sit would go away		.687				
4759fantisized about how it turn out		.597				
59crticised self		.579				
3847took it out on others		.544				
1317expressed anger at person		.476				
3241refused to think about it		-.475				
3140avoided people	-.424	.455				
711hoped fr miracle		.422				
1621tried to forget			.683			
3544made light of it			.604			
4963though how admired person handle it			.587			

4860prayed			.572			
2836found new faith			.564			
812went with fate			.443			
1115look on bright side						
1520inspired to be creative						
37tried to get change mind				.695		
3746stood ground and fought	.425			.621		
1925apologised ort made up			.436	.540		
2330came out postively					.756	
4556changed self					.725	
2938rediscovered import in life					.695	
1823changed as person good					.631	
4352came up diff solutions					.614	
4251promised self different next time					.558	
610left open						.766
2431talked to person who could do						.527
3948drew on past experience						.425
2735tried to not act hastily						.415

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a,b]

a. Age groups = 40-50

b. Rotation converged in 27 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
3645talked to someone about feelings	.811					
48talked to someone	.675					.428
3342asked respected friend for advice	.664					
1418accepted sympathy	.540				.406	
2128let my feelings out	.412					
2533self medicated food etc		.725				
4658wished sit would go away		.687				
4759fantisized about how it turn out		.618				
59crticised self		.587				
3847took it out on others		.553				
3241refused to think about it		-.480				
3140avoided people		.472				

1317expressed anger at person		.469				
711hoped fr miracle		.422				
1621tried to forget			.629			
3544made light of it			.623			
4963though how admired person handle it			.606			
4860prayed			.584			
2836found new faith			.577			
812went with fate			.471			.407
1115look on bright side			.421		.418	
1520inspired to be creative			.412			
2229realised i caused problem						
37tried to get change mind				.698		
3746stood ground and fought	.428			.615		
1925apologised ort made up			.479	.564		
4556changed self					.739	
2938rediscovered import in life					.714	
1823changed as person good	.491				.704	
2330came out postively					.701	
4352came up diff solutions					.649	
4251promised self different next time					.520	
610left open						.768
2431talked to person who could do	.438					.595
2735tried to not act hastily						.447
3948drew on past experience						.443
1722got professional help	.412					.415

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a]

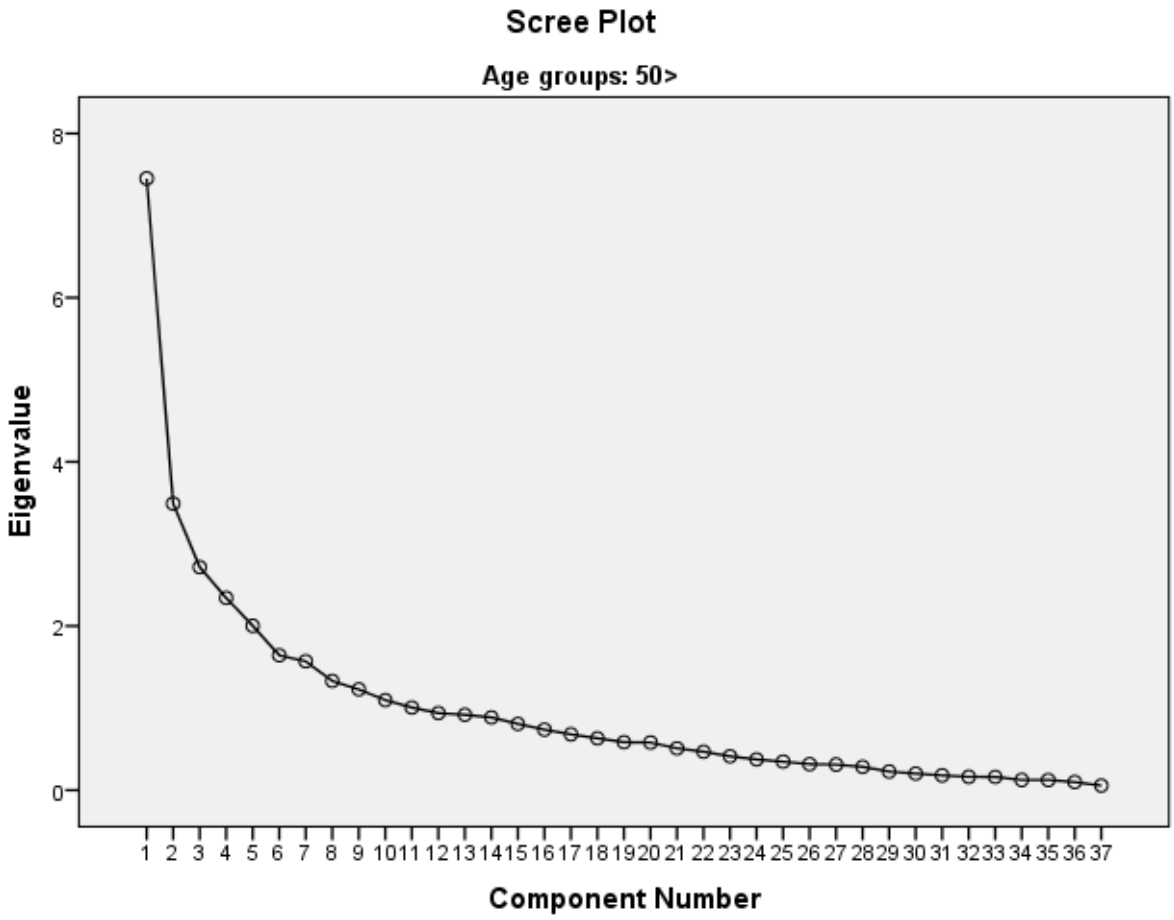
a. Age groups = 40-50

OVER 50

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.638
Bartlett's Test of Sphericity	Approx. Chi-Square	1327.332
	df	666
	Sig.	.000

a. Age groups = 50>



Communalities[a]

	Initial	Extraction
37tried to get change mind	1.000	.545
48talked to someone	1.000	.559
59crticised self	1.000	.510
610left open	1.000	.261

711hoped fr miracle	1.000	.608
812went with fate	1.000	.472
1115look on bright side	1.000	.560
1317expressed anger at person	1.000	.600
1418accepted sympathy	1.000	.601
1520inspired to be creative	1.000	.523
1621tried to forget	1.000	.390
1722got professional help	1.000	.450
1823changed as person good	1.000	.769
1925apologised ort made up	1.000	.506
2128let my feelings out	1.000	.565
2229realised i caused problem	1.000	.592
2330came out postively	1.000	.672
2431talked to person who could do	1.000	.497
2533self medicated food etc	1.000	.316
2735tried to not act hastily	1.000	.389
2938rediscovered import in life	1.000	.687
2836found new faith	1.000	.488
3140avoided people	1.000	.389
3241refused to think about it	1.000	.402
3342asked respected friend for advice	1.000	.634
3544made light of it	1.000	.483
3645talked to someone about feelings	1.000	.745
3746stood ground and fought	1.000	.476
3847took it out on others	1.000	.440
3948drew on past experience	1.000	.614
4251promised self different next time	1.000	.685
4352came up diff solutions	1.000	.619
4556changed self	1.000	.441
4658wished sit would go away	1.000	.651
4759fantisized about how it turn out	1.000	.627
4860prayed	1.000	.367
4963though how admired person handle it	1.000	.513

Extraction Method: Principal Component Analysis.

a. Age groups = 50>

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.452	20.141	20.141	7.452	20.141	20.141
2	3.491	9.436	29.578	3.491	9.436	29.578
3	2.718	7.345	36.922	2.718	7.345	36.922
4	2.342	6.330	43.252	2.342	6.330	43.252
5	2.002	5.411	48.663	2.002	5.411	48.663
6	1.643	4.440	53.103	1.643	4.440	53.103
7	1.569	4.242	57.345			
8	1.330	3.594	60.939			
9	1.228	3.318	64.257			
10	1.097	2.964	67.221			
11	1.006	2.718	69.940			
12	.939	2.539	72.479			
13	.918	2.481	74.960			
14	.886	2.394	77.354			
15	.807	2.181	79.535			
16	.738	1.993	81.528			
17	.680	1.838	83.366			
18	.631	1.706	85.073			
19	.584	1.579	86.652			
20	.581	1.570	88.222			
21	.510	1.378	89.600			
22	.467	1.263	90.863			
23	.413	1.115	91.978			
24	.375	1.013	92.991			
25	.347	.938	93.929			
26	.317	.856	94.785			
27	.311	.842	95.627			
28	.283	.766	96.393			
29	.227	.614	97.007			
30	.201	.544	97.551			
31	.180	.487	98.038			
32	.162	.438	98.476			
33	.161	.435	98.911			

34	.124	.336	99.247				
35	.124	.335	99.581				
36	.099	.266	99.848				
37	.056	.152	100.000				

Extraction Method: Principal Component Analysis.

a. Age groups = 50>

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
1823changed as person good	.742					
2330came out positively	.695					
2938rediscovered import in life	.689					
2836found new faith	.651					
4556changed self	.526					
4963though how admired person handle it	.414					
4860prayed						
4658wished sit would go away		.755				
4759fantisized about how it turn out		.691				
4251promised self different next time		.637				
2229realised I caused problem		.568				.460
2533self medicated food etc		.523				
812went with fate		.434				
59crticised self						
3645talked to someone about feelings			-.823			
1418accepted sympathy			-.735			
48talked to someone			-.664			
3342asked respected friend for advice			-.662			
1722got professional help			-.566			
2431talked to person who could do			-.536			
1317expressed anger at person				.649		
37tried to get change mind				.581		
2128let my feelings out				.556		
1621tried to forget				.530		
3544made light of it				.510		
1115look on bright side	.407			.457		
711hoped for miracle				.441		

3847took it out on others				.440		
4352came up diff solutions					.704	
3948drew on past experience					.688	
2735tried to not act hastily					.559	
1520inspired to be creative	.456				.480	
3746stood ground and fought					.418	
3140avoided people					-.405	
1925apologised ort made up						.554
610left open						.467
3241refused to think about it						.401

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a,b]

a. Age groups = 50>

b. Rotation converged in 69 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
1823changed as person good	.767					
2330came out positively	.712					
2938rediscovered import in life	.707					
4556changed self	.585					
2836found new faith	.584					
4963though how admired person handle it	.541			.422		
4658wished sit would go away		.742				
4759fantisized about how it turn out		.715				
4251promised self different next time		.641				
2229realised I caused problem		.530				.472
2533self medicated food etc		.509				
812went with fate		.506				
59crticised self		.489				
3645talked to someone about feelings			-.833			
1418accepted sympathy			-.766			
3342asked respected friend for advice			-.723			
48talked to someone			-.667			
2431talked to person who could do			-.588		.413	
1722got professional help			-.542			
1317expressed anger at person				.666		

37tried to get change mind				.619		
2128let my feelings out			-.402	.587		
1621tried to forget				.552		
711hoped for miracle		.503		.509		
3544made light of it				.508		
1115look on bright side	.483			.499		
3847took it out on others				.475		
4860prayed	.428			.439		
3948drew on past experience					.738	
4352came up diff solutions					.692	
2735tried to not act hastily					.566	
1520inspired to be creative	.533				.544	
3746stood ground and fought	.423				.505	
3140avoided people					-.429	
1925apologised ort made up						.599
610left open						.478
3241refused to think about it						.464

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a]

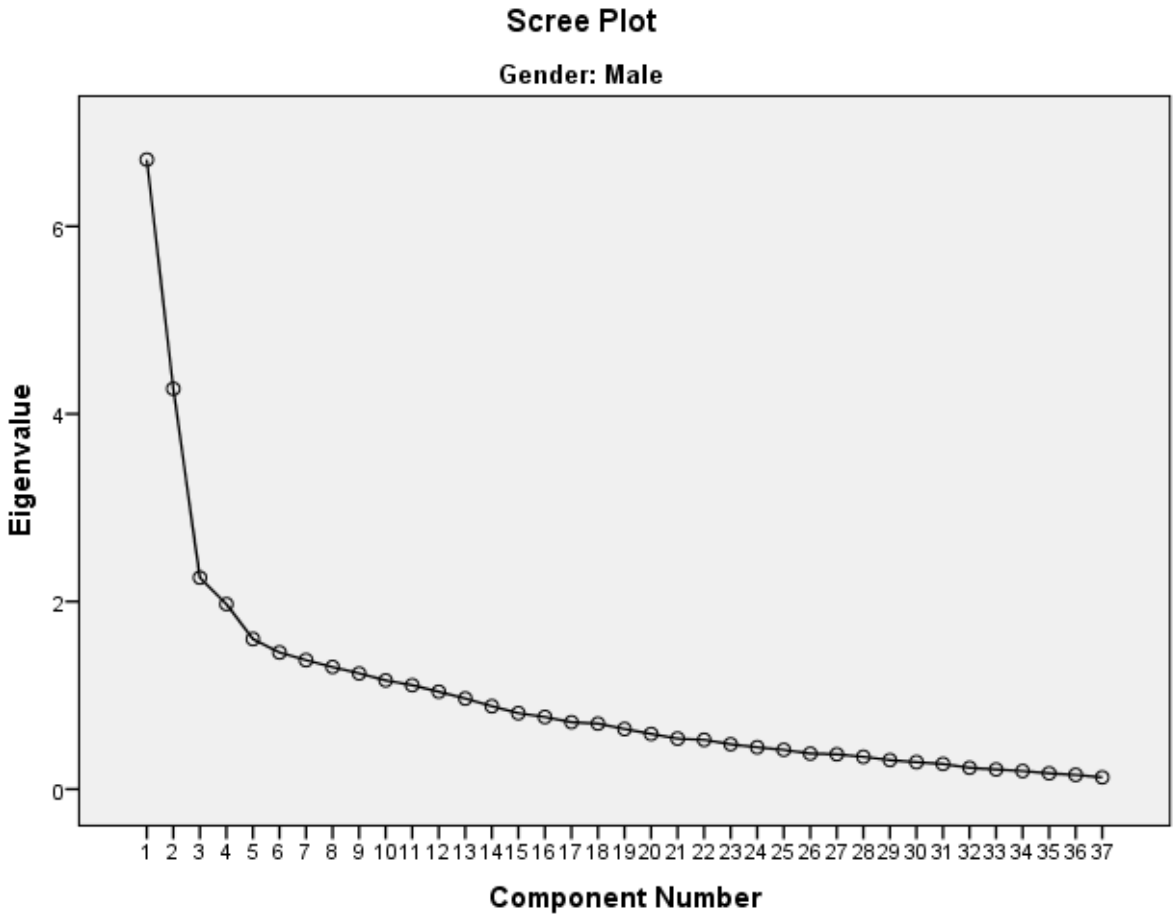
a. Age groups = 50>

GENDER SPLIT
MALES

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.704
Bartlett's Test of Sphericity	Approx. Chi-Square	1651.031
	df	666
	Sig.	.000

a. Gender = Male



Communalities[a]

	Initial	Extraction
37tried to get change mind	1.000	.369
48talked to someone	1.000	.534
59crticised self	1.000	.508
610left open	1.000	.537
711hoped for miracle	1.000	.535
812went with fate	1.000	.495
1115look on bright side	1.000	.454
1317expressed anger at person	1.000	.408
1418accepted sympathy	1.000	.525
1520inspired to be creative	1.000	.516
1621tried to forget	1.000	.493
1722got professional help	1.000	.401
1823changed as person good	1.000	.550
1925apologised ort made up	1.000	.421
2128let my feelings out	1.000	.581
2229realised i caused problem	1.000	.556
2330came out positively	1.000	.450
2431talked to person who could do	1.000	.534
2533self medicated food etc	1.000	.374
2735tried to not act hastily	1.000	.198
2938rediscovered import in life	1.000	.585
2836found new faith	1.000	.481
3140avoided people	1.000	.485
3241refused to think about it	1.000	.273
3342asked respected friend for advice	1.000	.645
3544made light of it	1.000	.569
3645talked to someone about feelings	1.000	.639
3746stood ground and fought	1.000	.530
3847took it out on others	1.000	.365
3948drew on past experience	1.000	.495
4251promised self different next time	1.000	.593
4352came up diff solutions	1.000	.534
4556changed self	1.000	.586
4658wished sit would go away	1.000	.511
4759fantisized about how it turn out	1.000	.612
4860prayed	1.000	.441
4963though how admired person handle it	1.000	.479

Extraction Method: Principal Component Analysis.

a. Gender = Male

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.712	18.139	18.139	6.712	18.139	18.139
2	4.268	11.535	29.675	4.268	11.535	29.675
3	2.255	6.094	35.768	2.255	6.094	35.768
4	1.972	5.331	41.099	1.972	5.331	41.099
5	1.600	4.325	45.424	1.600	4.325	45.424
6	1.457	3.938	49.363	1.457	3.938	49.363
7	1.376	3.718	53.081			
8	1.302	3.518	56.599			
9	1.234	3.336	59.935			
10	1.159	3.133	63.068			
11	1.108	2.994	66.062			
12	1.039	2.808	68.870			
13	.966	2.610	71.480			
14	.884	2.388	73.868			
15	.810	2.189	76.057			
16	.769	2.079	78.136			
17	.714	1.930	80.066			
18	.698	1.887	81.952			
19	.641	1.733	83.686			
20	.589	1.592	85.277			
21	.538	1.455	86.732			
22	.526	1.421	88.153			
23	.479	1.294	89.446			
24	.446	1.206	90.653			
25	.419	1.132	91.785			
26	.378	1.022	92.807			
27	.372	1.005	93.812			
28	.344	.931	94.743			
29	.310	.838	95.581			
30	.288	.779	96.360			
31	.268	.725	97.085			
32	.228	.616	97.700			
33	.210	.568	98.268			
34	.193	.522	98.790			

35	.169	.457	99.247				
36	.152	.412	99.659				
37	.126	.341	100.000				

Extraction Method: Principal Component Analysis.

a. Gender = Male

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
4352came up diff solutions	.745					
3948drew on past experience	.622					
1520inspired to be creative	.604					
3746stood ground and fought	.588					
4556changed self	.493					
2330came out positively	.488					
4963though how admired person handle it						
2735tried to not act hastily						
59crticised self		.690				
4759fantisized about how it turn out		.676				
4658wished sit would go away		.660				
2229realised I caused problem		.654				
4251promised self different next time	.406	.598				
1621tried to forget		.582				
3847took it out on others		.539				
3140avoided people		.538				-.434
1317expressed anger at person		.538				
812went with fate		.512				
711hoped for miracle		.509				
2533self medicated food etc		.435				
1925apologised ort made up		.421				
3645talked to someone about feelings			.761			
3342asked respected friend for advice			.757			
2128let my feelings out			.665			
1418accepted sympathy			.636			
48talked to someone			.442			
2836found new faith				-.682		
4860prayed				-.492		

1823changed as person good	.436			-.479		
2938rediscovered import in life				-.472	-.450	
37tried to get change mind				.463		
610left open					.709	
2431talked to person who could do					.464	
1722got professional help					.435	
3544made light of it						.731
1115look on bright side						.584
3241refused to think about it						

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a,b]

a. Gender = Male

b. Rotation converged in 26 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
4352came up diff solutions	.727					
1520inspired to be creative	.664					
3746stood ground and fought	.651		.427			
3948drew on past experience	.642					
4556changed self	.560			-.437		
2330came out positively	.540					
4963though how admired person handle it	.492		.491			
2735tried to not act hastily						
4759fantisized about how it turn out		.686				
59crticised self		.679				
4658wished sit would go away		.649				
2229realised I caused problem		.640				
4251promised self different next time	.437	.603				
1621tried to forget		.599				
812went with fate		.565				
1317expressed anger at person		.564				
711hoped for miracle		.544				
3847took it out on others		.544				
3140avoided people		.504				-.445
1925apologised ort made up		.455				
2533self medicated food etc		.425				

3342asked respected friend for advice			.779			
3645talked to someone about feelings			.763			
2128let my feelings out			.688			
1418accepted sympathy			.647			
48talked to someone	.407		.511		.419	
2431talked to person who could do			.510		.510	
2836found new faith				-.673		
1823changed as person good	.507			-.544		
4860prayed			.407	-.528		
2938rediscovered import in life				-.499		
37tried to get change mind				.418		
610left open					.716	
1722got professional help					.487	
3544made light of it						.697
1115look on bright side						.625
3241refused to think about it						

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a]

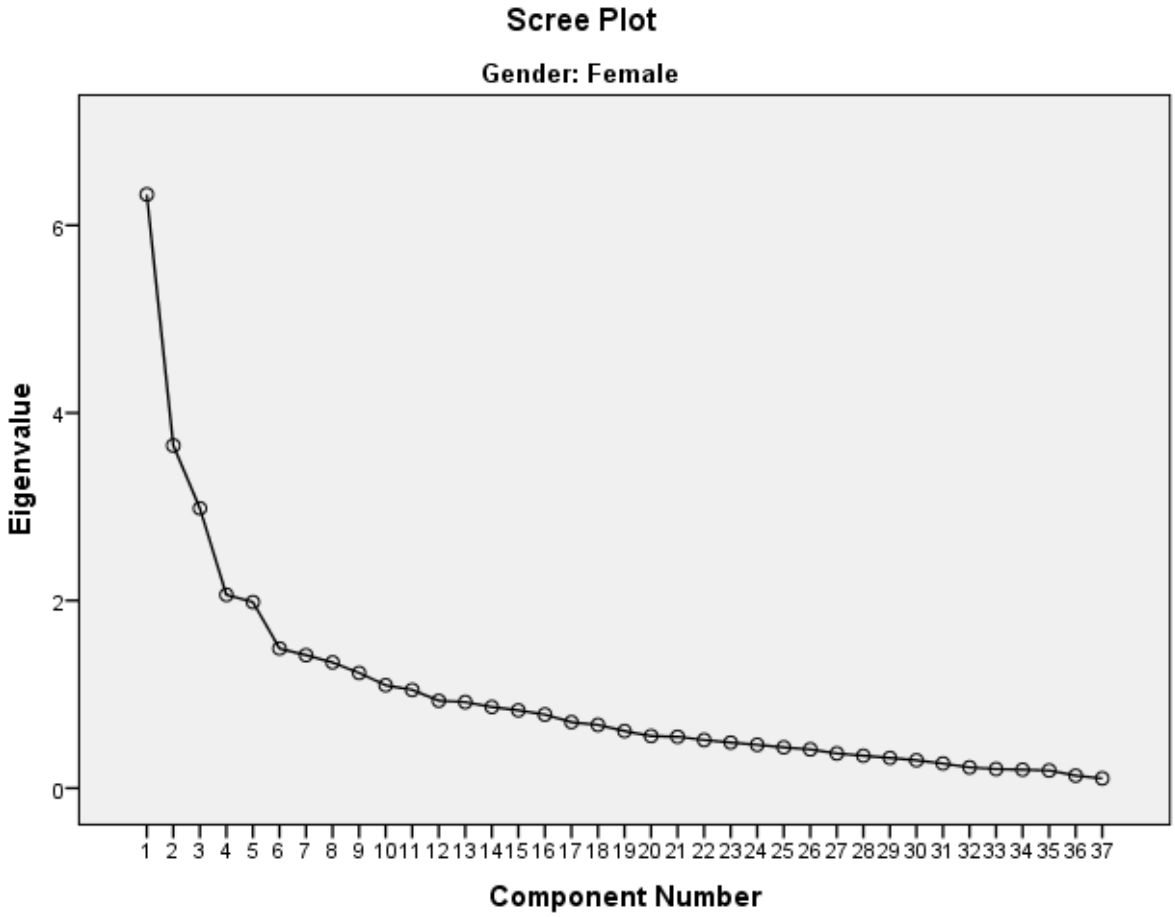
a. Gender = Male

FEMALES

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.671
Bartlett's Test of Sphericity	Approx. Chi-Square	1492.692
	df	666
	Sig.	.000

a. Gender = Female



Communalities[a]

	Initial	Extraction
37tried to get change mind	1.000	.581
48talked to someone	1.000	.564
59crticised self	1.000	.469
610left open	1.000	.579
711hoped fr miracle	1.000	.555
812went with fate	1.000	.540
1115look on bright side	1.000	.540
1317expressed anger at person	1.000	.560
1418accepted sympathy	1.000	.446
1520inspired to be creative	1.000	.484
1621tried to forget	1.000	.638
1722got professional help	1.000	.479
1823changed as person good	1.000	.654
1925apologised ort made up	1.000	.525
2128let my feelings out	1.000	.402
2229realised i caused problem	1.000	.300
2330came out postively	1.000	.680
2431talked to person who could do	1.000	.428
2533self medicated food etc	1.000	.464
2735tried to not act hastily	1.000	.367
2938rediscovered import in life	1.000	.650
2836found new faith	1.000	.586
3140avoided people	1.000	.235
3241refused to think about it	1.000	.601
3342asked respected friend for advice	1.000	.465
3544made light of it	1.000	.471
3645talked to someone about feelings	1.000	.696
3746stood ground and fought	1.000	.473
3847took it out on others	1.000	.355
3948drew on past experience	1.000	.409
4251promised self different next time	1.000	.453
4352came up diff solutions	1.000	.404
4556changed self	1.000	.476
4658wished sit would go away	1.000	.589
4759fantisized about how it turn out	1.000	.554
4860prayed	1.000	.346
4963though how admired person handle it	1.000	.481

Extraction Method: Principal Component Analysis.

a. Gender = Female

Total Variance Explained[a]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.329	17.105	17.105	6.329	17.105	17.105
2	3.652	9.871	26.976	3.652	9.871	26.976
3	2.983	8.062	35.038	2.983	8.062	35.038
4	2.061	5.570	40.608	2.061	5.570	40.608
5	1.984	5.362	45.970	1.984	5.362	45.970
6	1.489	4.023	49.993	1.489	4.023	49.993
7	1.418	3.831	53.824			
8	1.341	3.623	57.448			
9	1.228	3.320	60.767			
10	1.097	2.965	63.733			
11	1.047	2.830	66.563			
12	.932	2.520	69.083			
13	.917	2.479	71.562			
14	.865	2.337	73.899			
15	.830	2.242	76.141			
16	.784	2.120	78.261			
17	.704	1.901	80.162			
18	.674	1.823	81.985			
19	.609	1.645	83.630			
20	.556	1.502	85.132			
21	.548	1.482	86.614			
22	.513	1.388	88.002			
23	.486	1.314	89.316			
24	.462	1.248	90.565			
25	.435	1.175	91.739			
26	.413	1.117	92.856			
27	.369	.999	93.855			
28	.345	.932	94.787			
29	.323	.872	95.660			
30	.296	.801	96.461			
31	.263	.710	97.171			
32	.221	.599	97.769			
33	.203	.550	98.319			
34	.197	.532	98.851			

35	.188	.508	99.359				
36	.133	.360	99.719				
37	.104	.281	100.000				

Extraction Method: Principal Component Analysis.

a. Gender = Female

b. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix[a,b]

	Component					
	1	2	3	4	5	6
3645talked to someone about feelings	.802					
3342asked respected friend for advice	.640					
1418accepted sympathy	.609					
48talked to someone	.585					
2431talked to person who could do	.572					
3241refused to think about it	-.558	.425				
1722got professional help	.490					
4352came up diff solutions						
1621tried to forget		.739				
3544made light of it		.649				
4963though how admired person handle it		.586				
4860prayed		.539				
2836found new faith		.523			.467	
4658wished sit would go away			.636			
812went with fate			.580			
711hoped for miracle			.579			.453
4759fantisized about how it turn out			.572			
2533self medicated food etc			.569			
3140avoided people			.471			
3847took it out on others			.444			
1520inspired to be creative						
2330came out positively				-.819		
2938rediscovered import in life				-.754		
1823changed as person good				-.746		
4556changed self				-.668		
4251promised self different next time				-.464		
37tried to get change mind					-.720	
1317expressed anger at person					-.602	

3746stood ground and fought					-.537	
1925apologised ort made up					-.514	
59crticised self			.411		-.503	
2128let my feelings out						
2229realised I caused problem						
610left open						.724
2735tried to not act hastily						.523
3948drew on past experience						.457
1115look on bright side						.445

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a,b]

a. Gender = Female

b. Rotation converged in 21 iterations.

Structure Matrix[a]

	Component					
	1	2	3	4	5	6
3645talked to someone about feelings	.826					
48talked to someone	.656					.452
3342asked respected friend for advice	.645					
1418accepted sympathy	.636					
2431talked to person who could do	.613					
1722got professional help	.519					
4352came up diff solutions	.454			-.431		
1621tried to forget		.714				
3544made light of it		.647				
4963though how admired person handle it		.609				
4860prayed		.566				
2836found new faith		.554				
3241refused to think about it	-.488	.512				
4658wished sit would go away			.661			
4759fantisized about how it turn out		.430	.604			
2533self medicated food etc			.599			
812went with fate			.579			
711hoped for miracle			.574			.434
3847took it out on others			.468			
3140avoided people			.462			
2938rediscovered import in life				-.765		

1823changed as person good				-.764		
2330came out positively				-.755		
4556changed self				-.679		
4251promised self different next time				-.559		
1520inspired to be creative						
37tried to get change mind					-.742	
1317expressed anger at person			.416		-.639	
3746stood ground and fought					-.586	
59crticised self			.451		-.540	
1925apologised ort made up					-.512	
2128let my feelings out					-.450	
2229realised I caused problem						
610left open						.721
2735tried to not act hastily						.577
3948drew on past experience						.532
1115look on bright side		.475		-.455		.529

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Gender = Female

APPENDIX 6

MIDLIFE CRISIS (MLC) DEFINTION THEMES AND EXPERIENCES - FREQUENCIES

MLC THEMES

MLC DEFINITION THEMES ALL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	stagnating - slowing	69	31.2	31.4	31.4
	internal thinking	97	43.9	44.1	75.5
	concern about death - aging	42	19.0	19.1	94.5
	Don't know	12	5.4	5.5	100.0
	Total	220	99.5	100.0	

MLC DEFINTION THEMES YOUNGER THAN 40

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	stagnating - slowing	19	38.8	38.8	38.8
	internal thinking	22	44.9	44.9	83.7
	concern about death - aging	4	8.2	8.2	91.8
	Don't know	4	8.2	8.2	100.0
	Total	49	100.0	100.0	

a. Age groups = <40

MLC DEFINITION THEMES AGED 40-50

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	stagnating - slowing	24	25.5	25.5	25.5
	internal thinking	48	51.1	51.1	76.6
	concern about death - aging	15	16.0	16.0	92.6
	Don't know	7	7.4	7.4	100.0
	Total	94	100.0	100.0	

a. Age groups = 40-50

BY GENDER

MLC DEFINITION THEME MALES

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	stagnating - slowing	36	31.3	31.3	31.3
	internal thinking	47	40.9	40.9	72.2
	concern about death - aging	25	21.7	21.7	93.9
	Don't know	7	6.1	6.1	100.0
	Total	115	100.0	100.0	

a. Gender = Male

MLC DEFINITION THEMES FEMALES

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	stagnating - slowing	33	31.4	31.4	31.4
	internal thinking	50	47.6	47.6	79.0
	concern about death - aging	17	16.2	16.2	95.2
	dont know	5	4.8	4.8	100.0
	Total	105	100.0	100.0	

a. Gender = Female

MLC THEME GENDER COMPARISON

		MALES	FEMALES		
Valid	stagnating - slowing	31.3	31.4		
	internal thinking	40.9	47.6		
	concern about death - aging	21.7	16.2		
	dont know	6.1	4.8		
	Total	100.0	100.0		

EXPERIENCE OF MLC

Experience of MLC ALL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Occurred	72	32.6	32.7	32.7
	Probably occurred	10	4.5	4.5	37.3
	possibly occurred	48	21.7	21.8	59.1
	did not occur	90	40.7	40.9	100.0
	Total	220	99.5	100.0	
Missing	System	1	.5		
Total		221	100.0		

Experience of MLC under 40

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Occurred	9	18.4	18.4	18.4
	Probably occurred	1	2.0	2.0	20.4
	possibly occurred	14	28.6	28.6	49.0
	did not occur	25	51.0	51.0	100.0
	Total	49	100.0	100.0	

a. Age groups = <40

Experience of ML 40-50

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Occurred	30	31.9	31.9	31.9
	Probably occurred	7	7.4	7.4	39.4
	possibly occurred	21	22.3	22.3	61.7
	did not occur	36	38.3	38.3	100.0
	Total	94	100.0	100.0	

a. Age groups = 40-50

Experience of MLC over 50

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Occurred	33	42.9	42.9	42.9
	Probably occurred	2	2.6	2.6	45.5
	possibly occurred	13	16.9	16.9	62.3
	did not occur	29	37.7	37.7	100.0
	Total	77	100.0	100.0	

a. Age groups = 50>

Experience of MLC AGE COMPARISON

		< 40	40-50	➢ 50	
Valid	Occured	18.4	31.9	42.9	
	Probably occurred	2.0	7.4	2.6	
	possibly occurred	28.6	22.3	16.9	
	did not occur	51.0	38.3	37.7	
	Total	100.0	100.0	100.0	

BY GENDER

Experience of MLC males

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Occurred	41	35.7	35.7	35.7
	Probably occurred	4	3.5	3.5	39.1
	possibly occurred	23	20.0	20.0	59.1
	did not occur	47	40.9	40.9	100.0
	Total	115	100.0	100.0	

a. Gender = Male

Experience of MLC females

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Occurred	31	29.5	29.5	29.5
	Probably occurred	6	5.7	5.7	35.2
	possibly occurred	25	23.8	23.8	59.0
	did not occur	43	41.0	41.0	100.0
	Total	105	100.0	100.0	

a. Gender = Female

Experience of MLC GENDER COMPARISON

		MALE	FEMALE		
Valid	Occurred	35.7	29.5		
	Probably occurred	3.5	5.7		
	possibly occurred	20.0	23.8		
	did not occur	40.9	41.0		
	Total	100.0	100.0		

APPENDIX 7 MULTIPLE REGRESSION ANALYSIS

Dependent variable = MLC and Independent variables = MTQ

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.523[b]**	**.273**	.253	1.14960	.273	13.779	3	110	.000

a. Gender = Male

b. Predictors: (Constant), WORK GENDER, DEATH GENDER, STAG GENDER (MTQ GENDER)

c. Dependent Variable: Experience of MLC

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.360[b]	.130	.104	1.19976	.130	5.017	3	101	.003

a. Gender = Female

b. Predictors: (Constant), WORK GENDER, DEATH GENDER, STAG GENDER (MTQ GENDER)

c. Dependent Variable: Experience of MLC

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.430[b]	.185	.131	1.05336	.185	3.405	3	45	.025

a. Age groups = <40

b. Predictors: (Constant), WORK AGE, DEATH AGE, STAG AGE (MTQ AGE)

c. Dependent Variable: Experience of MLC

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.348[b]	.121	.092	1.22160	.121	4.125	3	90	.009

a. Age groups = 40-50

b. Predictors: (Constant), WORK AGE, DEATH AGE, STAG AGE (MTQ AGE)

c. Dependent Variable: Experience of MLC

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.615[b]**	**.378**	.352	1.10498	.378	14.592	3	72	.000

a. Age groups = 50>

b. Predictors: (Constant), WORK AGE, DEATH AGE, STAG AGE (MTQ AGE)

c. Dependent Variable: Experience of MLC

Dependant Variable = Midlife crisis (MLC) and Independent Variable =WCQ

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.569[b]**	**.324**	.099	1.07253	.324	1.438	12	36	.194

a. Age groups = <40

b. Predictors: (Constant), PROBLEM SOLV, INTRO, CONFRONT COP, WORK AGE, DEATH AGE, SOC SUPP, STAB, DETACHMENT, WISHFUL THINK, STAG AGE, POSITIVITY, CLOSE

c. Dependent Variable: Experience of MLC

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.435[b]	.190	.070	1.23633	.190	1.579	12	81	.114

a. Age groups = 40-50

b. Predictors: (Constant), PROBLEM SOLV, DEATH AGE, CONFRONT COP, DETACHMENT, SOC SUPP, STAG AGE, INTRO, POSITIVITY, WORK AGE, CLOSE, STAB, WISHFUL THINK

c. Dependent Variable: Experience of MLC

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.628[b]**	**.395**	.280	1.16527	.395	3.426	12	63	.001

a. Age groups = 50>

b. Predictors: (Constant), PROBLEM SOLV, DEATH AGE, INTRO, DETACHMENT, WORK AGE, CLOSE, WISHFUL THINK, CONFRONT COP, SOC SUPP, POSITIVITY, STAB, STAG AGE

c. Dependent Variable: Experience of MLC

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.569[b]**	**.324**	.243	1.15723	.324	4.029	12	101	.000

a. Gender = Male

b. Predictors: (Constant), PROBLEM SOLV, WORK AGE, INTRO, SOC SUPP, DEATH AGE, CONFRONT COP, DETACHMENT, CLOSE, POSITIVITY, STAB, STAG AGE, WISHFUL THINK

c. Dependent Variable: Experience of MLC

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.461[b]	.213	.110	1.19549	.213	2.074	12	92	.026

a. Gender = Female

b. Predictors: (Constant), PROBLEM SOLV, STAG AGE, CLOSE, DEATH AGE, CONFRONT COP, DETACHMENT, INTRO, POSITIVITY, SOC SUPP, WORK AGE, WISHFUL THINK, STAB

c. Dependent Variable: Experience of MLC

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.656[b]**	**.430**	.299	.83732179	.430	3.274	9	39	.005

a. Age groups = <40

b. Predictors: (Constant), PROBLEM SOLV, INTRO, CONFRONT COP, SOC SUPP, DETACHMENT, STAB, CLOSE, POSITIVITY, WISHFUL THINK **(WCQ)**

c. Dependent Variable: STAG AGE

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.599[b]**	**.359**	.291	.84222258	.359	5.234	9	84	.000

a. Age groups = 40-50

b. Predictors: (Constant), PROBLEM SOLV, STAB, CONFRONT COP, CLOSE, DETACHMENT, INTRO, SOC SUPP, POSITIVITY, WISHFUL THINK **(WCQ & BIG 3)**

c. Dependent Variable: STAG AGE

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.671[b]**	**.451**	.376	.79021033	.451	6.020	9	66	.000

a. Age groups = 50>

b. Predictors: (Constant), PROBLEM SOLV, WISHFUL THINK, SOC SUPP, INTRO, DETACHMENT, CLOSE, CONFRONT COP, POSITIVITY, STAB

c. Dependent Variable: STAG AGE

Model Summary ALL PARTICIPANTS

Model	R	R Square[b]	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	**.628[a]**	**.394**	.362	.79329803	.394	12.301	11	208	.000	1.938

a. Predictors: PROBLEM SOLV, WISHFUL THINK, INTRO ALL, SIC FAM-REL, DETACHMENT, CONFRONT COP, CLOSE ALL, SOC SUPP, S&C WORK, POSITIVITY, STAB FAM-REL (WAYS AND BIG 3 PLUS 3)

b. Dependent Variable: STAG AGE

c. Linear Regression through the Origin

Model Summary ALL

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	**.594[a]**	**.353**	.325	.82139850	.353	12.644	9	209	.000	2.008

a. Predictors: (Constant), PROBLEM SOLV, WISHFUL THINK, DETACHMENT, SOC SUPP, CONFRONT COP, INTRO, POSITIVITY, CLOSE, STAB (WAYS AND BIG 3)

b. Dependent Variable: STAG ALL

Model Summary ALL

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.501[a]**	**.251**	.230	.87375031	.251	11.833	6	212	.000

a. Predictors: (Constant), PROBLEM SOLV, WISHFUL THINK, DETACHMENT, SOC SUPP, CONFRONT COP, POSITIVITY

b. Dependent Variable: STAG AGE

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.601[b]**	**.362**	.306	.83221592	.362	6.546	9	104	.000

a. Gender = Male

b. Predictors: (Constant), PROBLEM SOLV, CLOSE, INTRO, SOC SUPP, CONFRONT COP, POSITIVITY, STAB, DETACHMENT, WISHFUL THINK

c. Dependent Variable: STAG GENDER

Model Summary[a,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	**.647[b]**	**.418**	.363	.79791855	.418	7.594	9	95	.000

a. Gender = Female

b. Predictors: (Constant), PROBLEM SOLV, CLOSE, CONFRONT COP, STAB, DETACHMENT, INTRO, POSITIVITY, SOC SUPP, WISHFUL THINK

c. Dependent Variable: STAG GENDER

Model Summary ALL

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	**.536[a]**	**.287**	.277	.84976285	.287	28.869	3	215	.000	2.058

a. Predictors: (Constant), CLOSE, STAB, INTRO (BIG 3)

b. Dependent Variable: STAG ALL

Model Summary[a,d,e]

Model	R	R Square[c]	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	**.590[b]**	**.348**	.202	.88426992	.348	2.376	9	40	.029	1.981

a. Age groups = <40

b. Predictors: PROBLEM SOLV, INTRO, CONFRONT COP, SOC SUPP, CLOSE, DETACHMENT, STAB, POSITIVITY, WISHFUL THINK

c. For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

d. Dependent Variable: DEATH AGE

e. Linear Regression through the Origin

Model Summary[a,d,e]

Model	R	R Square[c]	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.467[b]	.219	.136	.92468922	.219	2.641	9	85	.010	1.538

a. Age groups = 40-50

b. Predictors: PROBLEM SOLV, STAB, CONFRONT COP, CLOSE, DETACHMENT, INTRO, SOC SUPP, POSITIVITY, WISHFUL THINK

c. For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This cannot be compared to R Square for models which include an intercept.

d. Dependent Variable: DEATH AGE

e. Linear Regression through the Origin

Model Summary[a,d,e]

Model	R	R Square[c]	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	**.617[b]**	**.380**	.297	.83827261	.380	4.568	9	67	.000	1.929

a. Age groups = 50>

b. Predictors: PROBLEM SOLV, WISHFUL THINK, SOC SUPP, DETACHMENT, INTRO, CLOSE, POSITIVITY, CONFRONT COP, STAB

c. For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

d. Dependent Variable: DEATH AGE

e. Linear Regression through the Origin

Model Summary[a,d,e]

Model	R	R Square[c]	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.263[b]	.069	-.018	1.00411106	.069	.794	9	96	.622	1.596

a. Gender = Female

b. Predictors: PROBLEM SOLV, CLOSE, CONFRONT COP, WISHFUL THINK, DETACHMENT, INTRO, POSITIVITY, SOC SUPP, STAB

c. For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

d. Dependent Variable: DEATH GENDER

e. Linear Regression through the Origin

Model Summary

Model	R	R Square[c]	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.476[b]	.227	.161	.91602938	.227	3.427	9	105	.001	1.710

a. Gender = Male

b. Predictors: PROBLEM SOLV, WISHFUL THINK, SOC SUPP, INTRO, CONFRONT COP, DETACHMENT, POSITIVITY, CLOSE, STAB

c. For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

d. Dependent Variable: DEATH GENDER

e. Linear Regression through the Origin

HIERARCHICAL MULTIPLE REGRESSION ANALYSIS - ALL PARTICIPANTS
STAG, DEATH AND MLC = DEPENDANT VARIABLES.
BIODATA BIG THREE PERSONALITY AND WCQ = INDEPENDENT VARIABLES

Model Summary ALL PARTICIPANTS STAGNATION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.266[a]	.071	.044	.97729470
2	.543[b]	.295	.261	.85937183
3	.603[c]	.364	.313	.82872758

a. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, CHILD GEOG, RELIGION ALL, PARENT INFLUENCE

b. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, CHILD GEOG, RELIGION ALL, PARENT INFLUENCE, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

c. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, CHILD GEOG, RELIGION ALL, PARENT INFLUENCE, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, SOC SUPP, CONFRONT COP, PROBLEM SOLV, POSITIVITY, DETACHMENT, WISHFUL THINK

d. Dependent Variable: STAG ALL

Model Summary ALL PARTICIPANTS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.353[a]	.124	.099	.95121731
2	.439[b]	.193	.154	.92200834
3	.521[c]	.272	.213	.88894014

a. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, CHILD GEOG, RELIGION ALL, PARENT INFLUENCE

b. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, CHILD GEOG, RELIGION ALL, PARENT INFLUENCE, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

c. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, CHILD GEOG, RELIGION ALL, PARENT INFLUENCE, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, SOC SUPP, CONFRONT COP, PROBLEM SOLV, POSITIVITY, DETACHMENT, WISHFUL THINK

d. Dependent Variable: DEATH ALL

Model Summary ALL PARTICIPANTS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.252[a]	.064	.037	1.27447	.064	2.383	6	210	.030
2	.361[b]	.130	.088	1.24010	.067	3.951	4	206	.004
3	.370[c]	.137	.068	1.25363	.007	.263	6	200	.953

a. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, CHILD GEOG, RELIGION ALL, PARENT INFLUENCE

b. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, CHILD GEOG, RELIGION ALL, PARENT INFLUENCE, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

c. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, CHILD GEOG, RELIGION ALL, PARENT INFLUENCE, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, SOC SUPP, CONFRONT COP, PROBLEM SOLV, POSITIVITY, DETACHMENT, WISHFUL THINK

d. Dependent Variable: Experience of MLC

APPENDIX 8
HIERARCHICAL MULTIPLE REGRESSION OF SELF REPORTED MIDLIFE CRISIS DATA ALL ASPECTS AGE AND GENDER

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig F Change
1	.437[b]	.191	.073	1.09247	.191	1.612	6	41	.168
2	.571[c]	.326	.095	1.07908	.135	1.171	6	35	.344
3	.618[d]	.382	.063	1.09789	.056	.703	4	31	.596

a. Age groups = <40

b. Predictors: (Constant), CHILDHOOD DTAB, PARENT INFLUENCE, RELATIONSHIPS, CHILD GEOG, WORK ISSUES, RELIGION ALL

c. Predictors: (Constant), CHILDHOOD DTAB, PARENT INFLUENCE, RELATIONSHIPS, CHILD GEOG, WORK ISSUES, RELIGION ALL, SOC SUPP, DETACHMENT, PROBLEM SOLV, POSITIVITY, WISHFUL THINK, CONFRONT COP

d. Predictors: (Constant), CHILDHOOD DTAB, PARENT INFLUENCE, RELATIONSHIPS, CHILD GEOG, WORK ISSUES, RELIGION ALL, SOC SUPP, DETACHMENT, PROBLEM SOLV, POSITIVITY, WISHFUL THINK, CONFRONT COP, INTRO ALL, CLOSE ALL, STAB FAM-REL, STAB

e. Dependent Variable: Experience of MLC

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.277[b]	.076	.012	1.28040	.076	1.187	6	86	.321
2	.340[c]	.115	-.017	1.29933	.039	.585	6	80	.741
3	.428[d]	.183	.011	1.28098	.068	1.577	4	76	.189

a. Age groups = 40-50

b. Predictors: (Constant), CHILDHOOD DTAB, CHILD GEOG, RELATIONSHIPS, WORK ISSUES, PARENT INFLUENCE, RELIGION ALL

c. Predictors: (Constant), CHILDHOOD DTAB, CHILD GEOG, RELATIONSHIPS, WORK ISSUES, PARENT INFLUENCE, RELIGION ALL, PROBLEM SOLV, SOC SUPP, POSITIVITY, CONFRONT COP, WISHFUL THINK, DETACHMENT

d. Predictors: (Constant), CHILDHOOD DTAB, CHILD GEOG, RELATIONSHIPS, WORK ISSUES, PARENT INFLUENCE, RELIGION ALL, PROBLEM SOLV, SOC SUPP, POSITIVITY, CONFRONT COP, WISHFUL THINK, DETACHMENT, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

e. Dependent Variable: Experience of MLC

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.311[b]	.097	.018	1.35841	.097	1.234	6	69	.300
2	.370[c]	.137	-.027	1.38979	.040	.486	6	63	.816
3	.531[d]	.282	.087	1.31014	.145	2.973	4	59	.026

a. Age groups = 50>

b. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, CHILD GEOG, RELIGION ALL, WORK ISSUES, PARENT INFLUENCE

c. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, CHILD GEOG, RELIGION ALL, WORK ISSUES, PARENT INFLUENCE, WISHFUL THINK, CONFRONT COP, SOC SUPP, PROBLEM SOLV, POSITIVITY, DETACHMENT

d. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, CHILD GEOG, RELIGION ALL, WORK ISSUES, PARENT INFLUENCE, WISHFUL THINK, CONFRONT COP, SOC SUPP, PROBLEM SOLV, POSITIVITY, DETACHMENT, CLOSE ALL, INTRO ALL, STAB FAM-REL, STAB

e. Dependent Variable: Experience of MLC

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.307[b]	.094	.043	1.29813	.094	1.839	6	106	.098
2	.433[c]	.188	.090	1.26562	.094	1.919	6	100	.085
3	.486[d]	.236	.109	1.25252	.049	1.526	4	96	.201

a. Gender = Male

b. Predictors: (Constant), CHILDHOOD DTAB, CHILD GEOG, WORK ISSUES, RELIGION ALL, RELATIONSHIPS, PARENT INFLUENCE

c. Predictors: (Constant), CHILDHOOD DTAB, CHILD GEOG, WORK ISSUES, RELIGION ALL, RELATIONSHIPS, PARENT INFLUENCE, PROBLEM SOLV, WISHFUL THINK, SOC SUPP, DETACHMENT, CONFRONT COP, POSITIVITY

d. Predictors: (Constant), CHILDHOOD DTAB, CHILD GEOG, WORK ISSUES, RELIGION ALL, RELATIONSHIPS, PARENT INFLUENCE, PROBLEM SOLV, WISHFUL THINK, SOC SUPP, DETACHMENT, CONFRONT COP, POSITIVITY, CLOSE ALL, INTRO ALL, STAB, STAB FAM-REL

e. Dependent Variable: Experience of MLC

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.297[b]	.088	.032	1.25299	.088	1.561	6	97	.167
2	.333[c]	.111	-.006	1.27723	.023	.392	6	91	.882
3	.472[d]	.223	.080	1.22155	.112	3.121	4	87	.019

a. Gender = Female

b. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, CHILD GEOG, PARENT INFLUENCE, WORK ISSUES, RELIGION ALL

c. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, CHILD GEOG, PARENT INFLUENCE, WORK ISSUES, RELIGION ALL, SOC SUPP, CONFRONT COP, POSITIVITY, WISHFUL THINK, PROBLEM SOLV, DETACHMENT

d. Predictors: (Constant), CHILDHOOD DTAB, RELATIONSHIPS, CHILD GEOG, PARENT INFLUENCE, WORK ISSUES, RELIGION ALL, SOC SUPP, CONFRONT COP, POSITIVITY, WISHFUL THINK, PROBLEM SOLV, DETACHMENT, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

e. Dependent Variable: Experience of MLC

DEPENDANT VARIABLE = STAGNATION + ALL 3 ASPECTS

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.339[b]	.115	-.040	1.01993557	.115	.740	7	40	.640
2	.712[c]	.507	.356	.80225273	.392	7.163	4	36	.000
3	.792[d]	.627	.415	.76483677	.120	1.601	6	30	.181

a. Age groups = <40

b. Predictors: (Constant), PAR INFL MALE, PARENT INFLUENCE, CHILDHOOD DTAB, WORK ISSUES, RELATIONSHIPS, RELIGION ALL, CHILD GEOG

c. Predictors: (Constant), PAR INFL MALE, PARENT INFLUENCE, CHILDHOOD DTAB, WORK ISSUES, RELATIONSHIPS, RELIGION ALL, CHILD GEOG, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

d. Predictors: (Constant), PAR INFL MALE, PARENT INFLUENCE, CHILDHOOD DTAB, WORK ISSUES, RELATIONSHIPS, RELIGION ALL, CHILD GEOG, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, PROBLEM SOLV, DETACHMENT, POSITIVITY, SOC SUPP, WISHFUL THINK, CONFRONT COP

e. Dependent Variable: STAG AGE

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.318[b]	.101	.027	.98635230	.101	1.366	7	85	.230
2	.568[c]	.323	.231	.87683051	.222	6.640	4	81	.000
3	.663[d]	.439	.312	.82960721	.116	2.581	6	75	.025

a. Age groups = 40-50

b. Predictors: (Constant), PAR INFL MALE, WORK ISSUES, CHILDHOOD DTAB, CHILD GEOG, PARENT INFLUENCE, RELATIONSHIPS, RELIGION ALL

c. Predictors: (Constant), PAR INFL MALE, WORK ISSUES, CHILDHOOD DTAB, CHILD GEOG, PARENT INFLUENCE, RELATIONSHIPS, RELIGION ALL, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

d. Predictors: (Constant), PAR INFL MALE, WORK ISSUES, CHILDHOOD DTAB, CHILD GEOG, PARENT INFLUENCE, RELATIONSHIPS, RELIGION ALL, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, CONFRONT COP, SOC SUPP, PROBLEM SOLV, POSITIVITY, DETACHMENT, WISHFUL THINK

e. Dependent Variable: STAG AGE

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.327[b]	.107	.014	.99343813	.107	1.146	7	67	.345
2	.585[c]	.342	.227	.87961039	.235	5.616	4	63	.001
3	.736[d]	.542	.405	.77143287	.200	4.151	6	57	.002

a. Age groups = 50>

b. Predictors: (Constant), PAR INFL MALE, RELATIONSHIPS, CHILD GEOG, CHILDHOOD DTAB, WORK ISSUES, PARENT INFLUENCE, RELIGION ALL

c. Predictors: (Constant), PAR INFL MALE, RELATIONSHIPS, CHILD GEOG, CHILDHOOD DTAB, WORK ISSUES, PARENT INFLUENCE, RELIGION ALL, CLOSE ALL, INTRO ALL, STAB, STAB FAM-REL

d. Predictors: (Constant), PAR INFL MALE, RELATIONSHIPS, CHILD GEOG, CHILDHOOD DTAB, WORK ISSUES, PARENT INFLUENCE, RELIGION ALL, CLOSE ALL, INTRO ALL, STAB, STAB FAM-REL, CONFRONT COP, POSITIVITY, SOC SUPP, WISHFUL THINK, DETACHMENT, PROBLEM SOLV

e. Dependent Variable: STAG AGE

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.368[b]	.136	.078	.95972978	.136	2.333	7	104	.030
2	.593[c]	.351	.280	.84788045	.216	8.312	4	100	.000
3	.662[d]	.438	.336	.81414425	.086	2.410	6	94	.033

a. Gender = Male

b. Predictors: (Constant), PAR INFL MALE, PARENT INFLUENCE, CHILD GEOG, CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, RELIGION ALL

c. Predictors: (Constant), PAR INFL MALE, PARENT INFLUENCE, CHILD GEOG, CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, RELIGION ALL, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

d. Predictors: (Constant), PAR INFL MALE, PARENT INFLUENCE, CHILD GEOG, CHILDHOOD DTAB, RELATIONSHIPS, WORK ISSUES, RELIGION ALL, INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, PROBLEM SOLV, SOC SUPP, DETACHMENT, CONFRONT COP, POSITIVITY, WISHFUL THINK

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.336[b]	.113	.048	.97575311	.113	1.740	7	96	.109
2	.625[c]	.390	.318	.82613007	.278	10.481	4	92	.000
3	.671[d]	.451	.342	.81100423	.060	1.577	6	86	.164

a. Gender = Female

b. Predictors: (Constant), PAR INFL MALE, PARENT INFLUENCE, WORK ISSUES, CHILDHOOD DTAB, RELATIONSHIPS, CHILD GEOG, RELIGION ALL

c. Predictors: (Constant), PAR INFL MALE, PARENT INFLUENCE, WORK ISSUES, CHILDHOOD DTAB, RELATIONSHIPS, CHILD GEOG, RELIGION ALL, INTRO ALL, STAB, CLOSE ALL, STAB FAM-REL

d. Predictors: (Constant), PAR INFL MALE, PARENT INFLUENCE, WORK ISSUES, CHILDHOOD DTAB, RELATIONSHIPS, CHILD GEOG, RELIGION ALL, INTRO ALL, STAB, CLOSE ALL, STAB FAM-REL, CONFRONT COP, SOC SUPP, POSITIVITY, DETACHMENT, PROBLEM SOLV, WISHFUL THINK

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.281[b]	.079	-.007	1.00339422
2	.604[c]	.365	.193	.89823949
3	.734[d]	.539	.301	.83617385

a. Age groups = <40

b. Predictors: (Constant), INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

c. Predictors: (Constant), INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, POSITIVITY, SOC SUPP, PROBLEM SOLV, DETACHMENT, WISHFUL THINK, CONFRONT COP

d. Predictors: (Constant), INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, POSITIVITY, SOC SUPP, PROBLEM SOLV, DETACHMENT, WISHFUL THINK, CONFRONT COP, RELATIONSHIPS, CHILDHOOD DTAB, CHILD GEOG, WORK ISSUES, PARENT INFLUENCE, RELIGION ALL

e. Dependent Variable: DEATH AGE

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.368[b]	.135	.096	.95079874
2	.460[c]	.212	.116	.94040623
3	.615[d]	.379	.248	.86730897

a. Age groups = 40-50

b. Predictors: (Constant), INTRO ALL, STAB, CLOSE ALL, STAB FAM-REL

c. Predictors: (Constant), INTRO ALL, STAB, CLOSE ALL, STAB FAM-REL, CONFRONT COP, DETACHMENT, SOC SUPP, POSITIVITY, PROBLEM SOLV, WISHFUL THINK

d. Predictors: (Constant), INTRO ALL, STAB, CLOSE ALL, STAB FAM-REL, CONFRONT COP, DETACHMENT, SOC SUPP, POSITIVITY, PROBLEM SOLV, WISHFUL THINK, WORK ISSUES, CHILDHOOD DTAB, RELATIONSHIPS, PARENT INFLUENCE, CHILD GEOG, RELIGION ALL

e. Dependent Variable: DEATH AGE

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.483[b]	.233	.189	.90614952
2	.635[c]	.404	.311	.83558330
3	.727[d]	.528	.398	.78077998

a. Age groups = 50>

b. Predictors: (Constant), INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

c. Predictors: (Constant), INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, POSITIVITY, CONFRONT COP, SOC SUPP, WISHFUL THINK, DETACHMENT, PROBLEM SOLV

d. Predictors: (Constant), INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, POSITIVITY, CONFRONT COP, SOC SUPP, WISHFUL THINK, DETACHMENT, PROBLEM SOLV, CHILDHOOD DTAB, CHILD GEOG, WORK ISSUES, PARENT INFLUENCE, RELATIONSHIPS, RELIGION ALL

e. Dependent Variable: DEATH AGE

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.345[b]	.119	.086	.95996356
2	.489[c]	.240	.164	.91813765
3	.595[d]	.354	.245	.87272309

a. Gender = Male

b. Predictors: (Constant), INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL

c. Predictors: (Constant), INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, PROBLEM SOLV, SOC SUPP, CONFRONT COP, DETACHMENT, POSITIVITY, WISHFUL THINK

d. Predictors: (Constant), INTRO ALL, CLOSE ALL, STAB, STAB FAM-REL, PROBLEM SOLV, SOC SUPP, CONFRONT COP, DETACHMENT, POSITIVITY, WISHFUL THINK, PARENT INFLUENCE, CHILD GEOG, CHILDHOOD DTAB, WORK ISSUES, RELATIONSHIPS, RELIGION ALL

e. Dependent Variable: DEATH GENDER

Model Summary[a,e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.198[b]	.039	.000	.99984103
2	.276[c]	.076	-.023	1.01152801
3	.555[d]	.308	.180	.90533651

a. Gender = Female

b. Predictors: (Constant), INTRO ALL, STAB, CLOSE ALL, STAB FAM-REL

c. Predictors: (Constant), INTRO ALL, STAB, CLOSE ALL, STAB FAM-REL, CONFRONT COP, SOC SUPP, DETACHMENT, POSITIVITY, PROBLEM SOLV, WISHFUL THINK

d. Predictors: (Constant), INTRO ALL, STAB, CLOSE ALL, STAB FAM-REL, CONFRONT COP, SOC SUPP, DETACHMENT, POSITIVITY, PROBLEM SOLV, WISHFUL THINK, CHILDHOOD DTAB, WORK ISSUES, CHILD GEOG, RELATIONSHIPS, PARENT INFLUENCE, RELIGIO ALL

APPENDIX 9 PCA SCORES 220 PARTICIPANTS

MLC SCORE	AGE	STAG	DEATH
4	30	1.43693	0.43261
3	30	1.38156	0.29925
1	30	0.92929	0.44837
4	31	-1.1648	-1.5033
4	31	0.57409	1.50214
4	31	0.37159	0.30316
3	31	0.13407	0.92789
1	32	0.62565	1.0921
4	32	0.59249	1.15688
1	32	0.79369	0.31014
4	32	1.12257	0.98603
4	33	2.61406	1.37842
3	33	0.32279	0.34719
4	33	0.41619	0.40245
3	34	0.67238	0.092
3	34	0.7052	0.64882
1	34	0.24607	0.30341
1	34	0.26579	0.45037
4	34	0.40169	0.28209
4	35	1.81533	1.17273
3	35	1.00265	2.35938
2	35	0.46594	2.89413
3	36	1.01066	-1.8879
4	36	1.61582	0.96908
4	36	0.93838	0.68899
4	36	1.5398	0.56172
4	36	0.27866	0.54638
4	37	0.49064	0.41192
4	37	0.18059	1.11707
4	37	0.52333	0.08682
3	37	0.30383	0.37365

4	37	0.84241	0.61315
1	37	0.01108	0.19285
3	37	0.38135	0.11783
1	37	0.25272	0.53347
4	37	0.99335	2.26693
4	38	1.07612	0.14104
4	38	1.32256	1.03268
4	38	1.27292	0.00856
4	38	1.09619	-0.376
1	38	1.51199	0.46413
3	38	0.62436	0.81346
4	38	0.38485	0.51332
4	38	0.65516	1.05196
3	38	-2.4654	0.67497
3	38	0.56431	0.63045
3	38	0.68804	0.90725
3	39	.12355	1.27672
1	39	0.66547	0.6005
3	40	0.04691	0.75528
3	40	0.8427	1.12337
3	40	1.67397	1.81663
4	40	0.9584	0.92145
4	40	1.06234	1.27949
1	40	1.55587	0.19041
3	40	1.63573	1.0869
4	40	0.43114	0.96989
4	40	0.02117	1.47426
1	40	0.21588	0.69015
4	40	0.89797	2.55458
1	40	1.00597	0.72069
4	40	0.00116	0.08488
4	40	0.24315	0.8779
3	41	0.0957	1.36774
4	41	1.19593	1.03539
4	41	0.83714	0.0382
4	41	1.36168	0.25777
3	41	1.69053	0.00444
4	41	1.38602	0.58793
1	41	1.06879	0.64312
3	41	0.26159	1.20279
1	42	1.01058	0.28331
3	42	0.68754	0.71598
4	42	0.80205	-0.8156
1	42	-0.0877	0.39262

1	42	0.61336	1.47848
4	42	0.48237	0.73621
4	42	0.99936	0.90065
1	42	0.9143	0.74167
4	42	0.42488	1.29019
4	42	0.12912	1.22016
1	43	0.64221	1.97057
1	43	1.02393	1.23055
3	43	0.46698	1.11495
3	43	0.43973	0.53132
1	43	1.06142	0.46892
2	43	0.74638	0.2386
3	43	1.03143	0.11521
1	43	0.52939	0.35197
1	43	1.04379	0.85772
4	43	0.60558	0.72902
1	44	2.25407	2.87763
1	44	0.21594	0.27152
3	44	0.25731	0.07102
4	44	0.25464	0.89612
1	44	0.84474	1.08077
3	44	0.38543	1.09028
3	44	-1.6785	0.29758
4	44	0.24793	1.04478
2	44	0.79056	0.64471
4	44	1.65946	0.67706
1	44	1.49732	0.15755
3	44	1.35009	0.47721
1	45	1.31012	1.04251
2	45	0.13839	0.17571
1	45	0.77088	0.12783
3	45	0.07995	0.70559
4	45	1.04896	0.40212
4	45	1.38926	0.40418
3	45	0.37926	0.95501
4	45	0.06637	0.57556
1	45	0.17596	0.05774
3	45	0.31737	0.814
3	45	1.14808	0.75272
1	45	1.57796	1.11386
1	45	0.33012	0.14919
1	45	1.36184	0.64796
4	46	0.33731	2.17998
4	46	0.263	0.0517

1	46	0.03283	0.45767
3	46	1.28197	0.74266
4	46	0.83533	0.03824
4	46	0.19606	1.29515
1	46	1.70418	0.01796
4	46	0.28266	0.75117
4	47	0.81951	1.43611
4	47	1.59428	0.67664
1	47	0.31254	1.74555
2	48	-1.1942	0.74356
4	48	1.44846	-2.0132
1	48	-0.27771	0.02293
3	48	2.36644	-1.2355
4	48	0.33927	1.25506
4	48	0.3067	0.12576
4	48	1.34075	0.11925
4	49	1.62335	0.72682
2	49	0.92743	0.88663
2	49	1.4285	1.10409
2	49	0.64794	0.08016
1	49	2.13391	2.45267
4	49	0.71782	0.15484
1	49	0.39031	0.45118
1	49	0.02456	0.69669
1	50	0.02364	1.2342
4	50	1.18119	0.47336
3	50		
1	50	0.39603	0.41145
1	50	-0.66803	0.32555
1	50	0.30871	0.54551
1	50	0.39426	-1.1996
4	51	0.37196	0.79279
4	51	0.35788	0.86969
4	51	0.98952	0.54137
2	51	0.14539	0.18586
1	51	0.32079	0.84462
4	51	1.41433	1.48628
3	52	1.14291	-1.3734
4	52	1.13805	0.76044
1	52	0.81807	0.98291
1	52	0.10674	0.98569
4	52	0.31005	1.47721

1	52	1.61328	0.12585
4	52	-0.2731	1.37949
1	52	1.23895	0.94395
4	52	0.28929	1.34893
1	53	0.58313	0.36661
1	53	0.72585	2.10876
4	53	0.11591	1.54329
1	53	1.05341	0.36981
2	53	0.95048	0.80881
1	53	0.83402	0.61464
3	53	0.06249	0.82258
			-
1	53	0.25367	0.21247
4	53	0.09413	1.52634
4	53	0.42275	1.264
4	53	2.61703	1.30542
4	53	0.112	0.06181
4	53	-1.024	1.99565
4	54	1.83387	-0.3643
1	54	1.58117	1.12316
3	54	2.49569	0.5267
4	55	0.75331	0.66168
1	55	1.42468	1.71789
3	55	0.14106	0.25318
1	55	0.43249	1.26358
1	55	2.40204	0.95262
4	55	0.41888	0.53655
1	55	0.23104	-0.7347
4	56	0.30989	0.45906
1	56	0.52349	1.88929
4	56	0.12491	0.72164
1	56	0.77734	0.66055
3	57	0.42436	0.46483
1	57	1.15473	0.72455
1	57	1.10584	1.25022
1	57	1.07416	0.60688
1	57	0.13531	0.08861
3	58	0.24849	0.60553
4	58	0.30435	0.46713
4	59	1.40274	0.49488
3	62	0.48502	1.13263
4	63	1.17467	1.42068
1	64	0.71946	0.74523
4	64	0.44504	0.56265

3	64	0.13133	0.70459
1	64	0.48092	0.48893
1	65	1.85847	0.59406
4	65	0.78191	0.90576
1	65	0.02678	1.20993
3	66	1.26548	0.26537
1	67	1.00485	68
4	67	-1.8964	2.15872
4	68	0.48841	0.75313
3	68	0.68464	1.08797
4	69	2.08837	1.76794
1	70	1.37802	0.47323
1	70	0.45937	0.72394
3	70	0.70857	1.55637
3	71	0.94667	0.28608
4	71	0.71152	0.33705

KEY FOR ABOVE PCA SCORES

MTQ ADJUSTED 7 PT SCALE		FREQUENCIES	
MTQ 1 = OCCURRED	1= -3 to to - 1.50	**31**	14.10%
MTQ 2 = PROB OCCURRED	2= -1.49 to -0.5	**68**	30.90%
MTQ 3 = POSS OCCURRED/	3 = -0.49 to +1.49}		
MTQ 4 = DIDN'T OCCUR	4 = + 1.50 to + 3}	**121**	55%
		220	

MLC 4 POINT SCALE	
MLC 1 OCCURRED	
MLC 2 PROB OCCURRED	
MLC 3 POSS OCCURRED	
MLC 4 DID NOT OCCUR	

DEF	SCORES -1.5 AND HIGHER
PROB	SCORES -0.5- -1.49

	% FREQ
	27.7
	13.2
TOTAL	40.9

APPENDIX 10 - Comprehensive Life Survey

Dear Survey participant

I am conducting research for a PhD in Consulting Psychology. The title of my thesis is:

"An Exploratory study of midlife transition in South Africa – In search of the midlife crisis."

I am at an advanced stage in my quest and have developed a model, constructed some measurement instruments and conducted a pilot study to establish construct validity. One of the instruments is an adaptation of a questionnaire used by Polish and Dutch researchers together with my own work.

The total survey takes about 20 minutes to complete. Please also ask your spouse or partner and friends or work colleagues who are over 30 years old to complete it as well.

I would really appreciate it if you could assist me by completing the questionnaire as soon as possible.

After you have completed the survey a voucher will be issued which entitles you to a report once the data has been analysed. A copy of the summary of the final Thesis will also be sent to you if you request this.

Yours Sincerely

Larry Palk

larryp@iafrica.com 0834140469

DO NOT PRESS THE BACK BUTTON IN YOUR BROWSER AT ANY POINT IN THE SURVEY

INFORMED CONSENT TO PARTICIPATE IN THE SURVEY

I hereby consent to participate in the survey of midlife transition issues. I understand that this assessment is being performed for research purposes only, by Lawrence C Palk who is working towards a PhD degree in Consulting Psychology. My Participation is completely voluntary and I may withdraw from participation in this project at any time.

The results of individual data and the answers to individual questions will be used for research purposes only and will not be disclosed.

- (•) I agree
- ( ) I do not agree

APPENDIX 11

FEEDBACK - RESEARCH PROJECT INTO MIDLIFE TRANSITION AND CRISIS.

Dear Participant

Please accept my apologies for the considerable delay in providing feedback on the research project and particularly your results. I totally underestimated the amount of work and time necessary to get to a stage where I can properly provide feedback on the outcomes of the research project.

CONCEPTUAL MODEL OF MIDLIFE TRANSITION PROCESS.

Attached on a spreadsheet is a copy of the **conceptual framework model** developed after finalising the literature survey and pilot research.

The model proposes that some life events or turning points may trigger off thoughts and/or feelings in a person which prompt an **internal reaction process**. Some specific triggering events inevitably occur during ages 40 to 60, but can also occur a bit earlier or later. For example, the illness or death of a close relative or friend can trigger off thoughts and/or feelings about one's own mortality. The reaction process can engender a first degree (mild), second degree (moderate) or a third degree (abnormal) stress reaction.

A further element of the reaction process which is sometimes triggered by the event is a spontaneous life review where, the individual starts reviewing where they are in their lives – personally, in families, relationships and/or in work situations. The life review in turn causes the individual to turn inwards for answers. This inward process or interiority is something that is known to occur predominantly in midlife. 44% of the participants in

this research project described this process when asked to define what they thought a midlife crisis may be.

The reaction process is dynamically influenced by a number of components, namely:

1. The method which the individual uses to cope with the stressful situation. Individuals use different ways of coping and the coping method used will determine whether the stress is relieved, increased or buried (albeit temporarily) by that individual. for example if an individual uses seeking social support as a way of coping this may give rise to independent advice as to how to resolve the issue. If however they use wishful thinking to cope thus hoping the situation will improve on its own then no action will be taken and the stress may continue or worsen.
2. The individual's biography (the structural, social and environmental factors in their lives).
3. Some individual personality traits – emotional stability vs neuroticism, introversion vs extraversion and openness to experience vs practical down-to-earthness.

This dynamic interaction between the event triggering the reaction and the personal and structural factors will determine whether the individual moves through the process with little trouble or becomes stuck. The stuckness itself then becomes part of the reaction process and in time will either resolve itself unconsciously or may have to be resolved though therapy, coaching, or self- help.. If the stress becomes heightened to the extent that it becomes dysfunctional to the individual, then this can be described as a midlife crisis.

By using the Statistical Package for the Social sciences (SPSS) I was able to analyse the data from 220 responders. The **conceptual framework model** was evaluated as a way of exploring the midlife transition period and midlife crisis in South Africa.

The data analysis enabled the discovery of a methodologically sound way of measuring midlife crisis in South Africa and at the same time validated, (to a more than significant degree), some factors which influenced the occurrence of the midlife crisis.
The comprehensive survey contained 4 datasets, namely:

- The Midlife Transition Questionnaire (MTQ),
- The Biographical Data Questionnaire (BIODATA),
- Three of the Big 5 Personality Factors (BIG 5)
- The Ways of Coping questionnaire (WAYS).

The data was first analysed using principal component analysis (PCA) whereby the following latent components or factors were extracted from the data:

I. From the MTQ 2 midlife crisis components emerged; provisionally named **stagnation** or **stuckness** and **death & aging concern.** The scores of each individual on these components were calculated which would indicate the extent to which that person has or will experience a midlife crisis or as Oles (1999) put it – the intensity of their midlife crisis.
II. From the BIODATA, 6 biographical components emerged, namely: **Religiosity, parental closeness, work stability, geographical origin, adult relationship stability and childhood stability**.
III. Using the BIG 5 questionnaire the 3 Personality Factors emerged, namely**: Anxiety (neuroticism), extraversion and openness to experience.**
IV. From the WAYS questionnaire 6 components emerged, namely: **positivity, wishful thinking, problem solving, detachment, seeking social support and confrontive coping.**

The definitions of these components and their polar opposites are found in Annexure 1 below (page 5- 8).

Using Hierarchical Multiple Regression Analysis (MRA), a strong relationship was found between the 2 components of stuckness and death and aging concern, on the one hand, with neuroticism, wishful thinking and religiosity/parental influence, on the other hand.

These latter 4 factors contributed over 80% to the scores on stuckness and death and aging concern.

I was also able to replicate the research findings internationally with regard to the percentage number of people's self-reported definitions and experiences of midlife crisis. An almost identical percentage of people in South Africa (33%) as in the United States, believed they had experienced a midlife crisis. A comparison between the self-reported experience and the more methodologically sound MTQ revealed that the self-reported midlife crisis was significantly overstated since only 15% of the responders had scores on the MTQ which would indicate that they had experienced a severe midlife crisis and a further 30% experienced a moderate midlife crisis. This finding is also similar to that found in the US where in depth research found that only 10% of the population actually experienced a severe midlife crisis. It is postulated that when people are asked whether they have experienced a midlife crisis they do not distinguish between a moderate and a severe crisis and the self-reported number who experience a midlife crisis will thus be overstated.

Your results are in the separate report.

PLEASE NOTE THE FOLLOWING:

1. The principal component analysis PCA calculates scores for each individual on the various components and these scores are normally distributed on a 7 point scale with a score of 0 being the midpoint or average score of the whole sample.
2. The components all have a polar opposite for example the polar opposite of stagnation is mobility. The scores between -1 to +1 are considered to fall within the general average of people in the sample and possibly even the population.
3. Minus scores are **not** to be seen as negative scores – they merely indicate a score close to the defined component. For example a score of -2 on the introversion component indicates the person is more introverted. Similarly, a score of -2 on religiosity indicates the person is high on religion whereas a score of +2 on religiosity indicates the person is not religious.

4. Scores from -1.1 to –2 or +1.1 to +2 indicate a definite tendency in the direction of the respective component or its polar opposite. e.g. a score of -1.5 on introversion indicates definite signs of an introverted personality. If the score on this component was say +1.5 this indicates a definite tendency to extraversion, (the opposite of introversion).
5. There are no right or wrong scores. The scores merely indicate tendencies derived from your responses to the survey.
6. The only exceptions to point 4 above are the components of midlife crisis - **stuckness** and **death and aging concern.** If you scored -0.8 to -1.49 on the components of stuckness and/or death-aging concern this seems to indicate that you may be experiencing or have experienced a mild to moderate midlife crisis. If you scored between -1.5 to -3 on one or both of these factors this would indicate a more severe crisis situation
7. If you have any queries, concerns or need any elaboration on the scores, please contact Larry Palk by email and I will respond. larryp@iafrica.com

ANNEXURE 1

MIDLIFE TRANSITION AND CRISIS ISSUES

1. STUCKNESS OR STAGNATION vs MOBILITY

1.1 Stuckness

- **Work** – blocked, meaningless, obstacles, unsatisfactory, unfair, wrong job, lack of advancement missed opportunities, left behind by peers, values, conflicts or compromises, can't achieve ambitions
- **In relationships or family** – Feeling of marking time or questioning – is this as good as it gets?
- **Change** – is needed, but you don't know how or what to change. You can't satisfy needs
- **Anxiety and/or depressed feelings** without known cause.

1.2 Mobility

Absence of feelings of above symptoms of stuckness or stagnation. Change is embraced. Adaptation and adjustment to new circumstances is/has taken place.

2. **DEATH AND/OR AGING ANXIETY vs ACCEPTANCE**

2.1 Death and/or aging Anxiety

- Feelings of concern about the inevitability of death (parents, family and own).
- Awareness and/or fear of disease and aging – of body and mind

2.2 Acceptance

Adjustment and adaptation to the aging process and future death by planning for retirement and taking action to remain fit and healthy in body and mind

BIOGRAPHICAL ISSUES

1. **RELIGIOSITY – present faith and belief in deity, devotion, religious upbringing**
   Religious vs non-religious
2. **PARENTAL AFFECT – live parent/s, parental figure and regular contact**
   Parents/parental figure alive and regular contact **vs** Parent/s deceased and/or little contact.
3. **WORK STABILITY – number of job changes and especially during midlife**
   Job stability **vs** job instability
4. **GEOGRAPHICAL AREA – birth and youth in city, town or rural area**
   Birth and youth in city urban area **vs** birth and youth in rural area
5. **CHILDHOOD STABILITY – number of schools attended, childhood sociability and happiness**
   Childhood stability **vs** instability
6. **RELATIONSHIP STABILITY – Adult relationship status, length, and number.**
   Adult relationship stability vs instability

PERSONALITY TRAITS

1. **NEUROTICISM VS EMOTIONAL STABILITY**

Neuroticism (Anxiety)

Proneness to experience unpleasant and disturbing emotions such as anger, anxiety, nervousness, tension, self-consciousness and impulsiveness

Emotional Stability

Calm, self-satisfied,

2. **INTROVERSION VS EXTRAVERSION**

Introversion

Loner, controlled impulses, internally stimulated.

Extraversion

Preference for social and lively activity, stimulated by environment

3. **OPENNESS TO EXPERIENCE**

Openness to experience

Receptiveness to abstract thinking, new ideas approaches and experiences

Down to earthiness

Preference for familiar, practical, moralistic and concrete

WAYS OF COPING

1. **POSITIVITY VS NEGATIVITY**

Positivity.

Describes efforts to create positive meaning by focusing on personal growth. It also has a religious dimension

Negativity

Gloomy outlook. Anticipates the worst

2. **WISHFUL THINKING (ESCAPE-AVOIDANCE) vs REALISTIC.**

Wishful thinking

Describes wishful thinking and behavioral efforts to escape or avoid the problem.

Realistic

Tendency towards having or expressing an awareness of things as they really are.

3. SEEKING SOCIAL SUPPORT vs HANDLING ON YOUR OWN

Seeking social support

Describes efforts to seek informational support, tangible support, and emotional support.

Handling on your own

Handling and/or researching situation on your own, not seeking help or advice from other people

4. CONFRONTIVE COPING vs DIPLOMACY

Confrontive coping

Describes aggressive efforts to alter the situation and suggests some degree of hostility and risk-taking.

Diplomacy

Dealing with the people aspects in a careful and tactful way.

5. DETACHMENT (DISTANCING) vs ATTACHMENT

Detachment

Describes cognitive efforts to detach oneself and to minimize the significance of the situation. Objective, disconnected, separate and aloof

Attachment

Connected, agreeing, unified compassionate

6. PLANFUL PROBLEM SOLVING vs UNSYSTEMATIC THINKING

Planful problem solving

Describes deliberate problem-focused efforts to alter the situation, coupled with an analytic approach to solving the problem.

Unsystematic thinking

Disorganised, confused and illogical thinking

L C Palk 4 May 2014